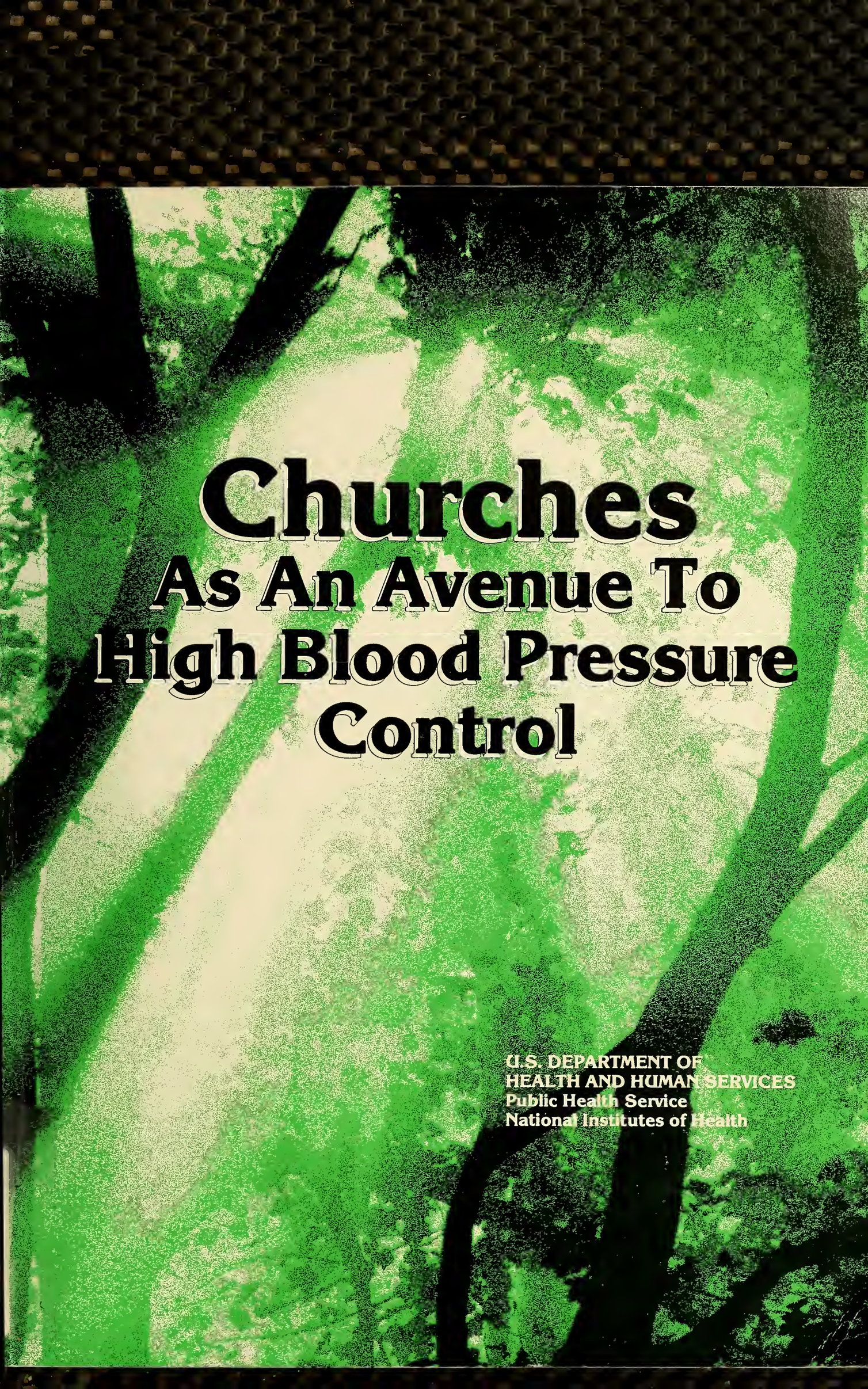

Churches
As An Avenue To High Blood Pressure Control

U.S. DEPARTMENT OF
HEALTH AND HUMAN SERVICES
Public Health Service
National Institutes of Health

Churches as an Avenue to High Blood Pressure Control

U.S. Department of Health and Human Services
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National Institutes of Health
National Heart, Lung, and Blood Institute
National High Blood Pressure Education Program

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PREFACE

Uncontrolled high blood pressure (HBP) is one of the greatest threats to the health of Americans. It is a major cause of heart disease and stroke. Heart attack is the leading cause of death in America today. In 1985, some 540,800 Americans died from heart attack, and more than 155,000 died from stroke.[1] Some 58 million Americans have high blood pressure (140/90 mm Hg or higher) warranting monitoring or some form of therapy or are taking antihypertensive medication. Some people are at greater risk of developing high blood pressure than others.[2]

- High blood pressure is a particular threat to minority populations, especially black Americans. Almost one in every three blacks has high blood pressure, and less than half of those are on HBP medication.[2]

- The prevalence of high blood pressure increases with age. For example, 13.7 percent of Americans age 25 to 34 have high blood pressure, compared to 64.3 percent of Americans age 65 to 74.[2]

- Although more men than women suffer from high blood pressure, women are more likely to be aware of their condition and have it under control.[2]

Anyone can have high blood pressure; therefore, HBP awareness, prevention, detection, and treatment programs must be broad-based, reaching people from all walks of life. This is one compelling reason why religious institutions — which touch the lives of America's poor and rich, black and white, old and young — are especially well positioned to support high blood pressure control programs.

A number of other factors make churches ideal settings for high blood pressure control activities. Churches exist in virtually all areas of the country, thus allowing for avenues whereby hard-to-reach populations are more easily identified and monitored. They generally have large memberships that help contribute to the diffusion of information throughout the community. Churches have a successful history of volunteerism and, thus, often have volunteer programs already in place. They are also known for their ability to influence entire families. In addition, churches have a history of helping the community by offering various types of programs (e.g., sex education, community improvement, individual and family counseling, and health education).[3]

Churches as an Avenue to High Blood Pressure Control is designed to assist health care professionals and leaders of churches, synagogues, and other religious institutions in establishing HBP control programs in their community. This guide provides information on the development and implementation of such programs. It presents readers with issues of concern, approaches to take, ways to expand and coordinate existing programs, and resources to contact for additional information and support.

This guide frequently uses the terms "church" and "church-based" to indicate *any* place of worship. As used here, the terms are generic and refer to churches, synagogues, temples, prayer meetings, and all other religious institutions.

Chapter I provides an overview of HBP control programs based in religious institutions. It discusses the role of churches in HBP control and the unique opportunities they afford health professionals attempting to target hard-to-reach populations. This chapter also addresses benefits that the church and the community may derive from the implementation of a successful HBP control program.

Chapter II outlines the basic planning steps needed to establish a church-based HBP control program. These steps include soliciting participation; selecting a model for program design; obtaining funding, equipment, and supplies; selecting a program coordinator; developing guidelines for screening events, followup activities, and program evaluation; recruiting and training volunteers; and developing a program schedule.

Chapter III provides the program coordinator with information on implementing a screening event for high blood pressure control. It discusses site selection, promotion, staffing and resource allocation, blood pressure measurement, and data collection techniques.

Chapter IV discusses the followup components of a HBP control program, including patient tracking, monitoring, support, and education.

Chapter V provides an overview of program evaluation with specific reference to church-based programs.

Exhibits throughout the guide give examples of specific resources, such as forms or procedures, developed by various HBP control programs.

The appendices contain additional resources so that program planners and coordinators can locate the information, expertise, and support they need to make their church-based HBP control program a success.

Appendix A describes a variety of materials and programs available to consumers, patients, and health professionals. Topics covered include high blood pressure, nutrition, exercise, taking medication, moderating alcohol consumption, blood pressure measure-

ment, improving adherence to HBP treatment, patient tracking, smoking, high blood pressure in the elderly, nondrug treatment for HBP control, and evaluation. Ordering information is provided.

Appendix B is a directory of useful contacts that can provide information on establishing a HBP control program.

Appendix C provides a five-part program used by one HBP control program to train volunteers in blood pressure measurement and referral.

Remember that this book is only a guide. It does not cover every issue or answer every question concerning HBP control. Nor does it discuss every single aspect of program planning, implementation, and evaluation. This guide will be most effective if readers recognize the uniqueness of their individual programs — in terms of population, cultural mix, resources, and current services — and adapt its contents to meet their particular needs.

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CHAPTER I
The Church and High Blood Pressure: An Overview

High blood pressure control programs require long-term commitment, careful planning, and some technical training. Why should churches get involved? There are many answers to this question, some related to the church, some to public health, and some to the community as a whole. Together, they add up to a compelling case for church-based HBP control programs.

What Is Involved?

A high blood pressure control program has four basic components.

- *Screening.* Blood pressure screening may take place at a specially organized event or at other gatherings such as church suppers. At either kind of screening, trained volunteers measure blood pressures. Screenings serve two purposes: (1) to detect persons with elevated blood pressures and assist their entry into the health care system; and (2) to monitor the pressures of those who are already aware of their HBP and undergoing treatment in order to continue to control their blood pressures.

- *Referral.* During screening, those with elevated readings are referred to a doctor or clinic for further evaluation and diagnosis. If a subsequent reading is normal or only slightly elevated, the person may be referred to a later screening in 6 months or a year.

- *Tracking.* After screening, program leaders contact individuals with elevated readings or the doctors or clinics to whom they were referred to ensure that further evaluation took place. Long-term tracking can involve continued patient contacts. Most church HBP programs also keep track of patients by monitoring their blood pressures at subsequent screenings.

- *Education and support.* Controlling high blood pressure usually means learning new habits such as taking HBP medication daily, losing weight, and breaking old habits such as using too much salt. Support groups, nutrition classes, and other educational sessions can help patients adhere to treatment[4, 5] and are important parts of a HBP control program.

Why Churches?

Health concerns are not new to the church. From the monastic hospitals of the Middle Ages to the church-sponsored teaching hospitals of today, healing has been part of the church's mission.

Today, churches lend themselves to preventive health services because they are social and cultural, as well as religious institutions. People gather at churches to mark major life events such as baptisms and marriages and for the more everyday purposes such as meetings, bazaars, and discussion groups. Churches have an established social support function and structure. Through their social networks, church members can offer each other sustained, mutual support for behavior change.[6] Behavior change plays an important role in many preventive health efforts and is an essential component of high blood pressure control.

Another reason churches make good sites for preventive health services is their influence. Churches reach the whole family, while other institutions such as schools and businesses reach only certain age groups. Often, the influence of the church extends to the outside community as well, via members who are active in other organizations. The permanence and prestige of churches contribute to their influence and make them effective health promoters.

Finally, there are the practical reasons. Religious institutions have the existing committees, groups, and volunteers to get programs started. Churches possess facilities (e.g., parish halls, Sunday school classrooms, meeting rooms) for programs such as HBP control activities. Churches are places where people already congregate (screening and monitoring are often held after worship services). And they have established communications systems, in the form of newsletters, sermons, bulletin boards, and meetings. All of these increase the chances of success for any program.

Why High Blood Pressure Control?

High blood pressure control is especially appropriate for church-based programs, partly because of the nature of the disease. Although deadly, high blood pressure has no symptoms. Mass screenings are one way it can be detected, and, as noted earlier, religious institutions often have the opportunity and facilities for screening events.

High blood pressure is also a chronic disease, and control requires long-term behavior change. Following the doctor's orders may mean taking daily medication, changing one's diet, exercising more, and quitting smoking — all difficult adjustments. Studies have shown that these lifestyle changes have a greater chance of success when accompanied by education and social support;[4, 5] and as several authorities have noted, education and support fit naturally into the life of many religious institutions.[3, 6-8]

Reaching the Hard to Reach and the Medically Underserved

The people who need blood pressure services the most are frequently those in rural and inner-city communities with the least access to health care. For example, blacks have a higher prevalence of high blood pressure than do whites and are less likely to have it under control. The disease tends to be more severe in blacks, and damage to organs such as the kidney and heart are greater.[9] Yet in many poor black communities, the health care system, which depends heavily on public health clinics and community health centers, is weak and overburdened.

Churches, on the other hand, are often strong in these communities. Experts point out that "as a long-standing tradition, the black church has met not only the spiritual but also the educational, physical, and social needs of its members and their families and friends."[6] For example, black clergy led the civil rights movement, and many still are active in voter registration drives and other civic activities. The black church provides strong social support to its members and serves as a link between its members and the wider community.[6]

Churches can be valuable allies to public health groups in reaching the hard to reach because churches can overcome the cultural barriers to health care that exist in many minority communities. Minorities may feel alienated from the mainstream health care system because of differences in health beliefs, attitudes, or language.[10, 11] In some cases, health providers know little about the cultural and religious beliefs of ethnic minorities and how their values affect their attitudes.[11] Studies have shown that blacks in rural areas are more likely to turn to family and friends for health information than to health professionals.[10] Because churches can provide information and services in a familiar, non-threatening setting, they can often succeed where outside health professionals cannot.

Everyone Benefits

Whether in rural areas, cities, or suburbs, church-based HBP control programs can benefit the entire community. The most obvious benefit is improved health. More people become aware of their high blood pressure as a result of such programs, more have it under control, and fewer die of heart disease, stroke, and kidney disease.

In addition, church HBP programs typically involve other community resources such as local health departments, local affiliates of the American Heart Association, hospitals, colleges, and universities. Acting as a catalyst, church programs can bring together people and groups that do not usually interact. Churches may recruit new members while retaining the interest and commitment of current members. The community as a whole may expand its volunteer network and enlarge its pool of shared resources.

Church Programs Are Working

First instituted in the 1970's primarily in the southeastern United States, church-based HBP control programs are growing in number. In 1981, the National Black Health Providers Task Force on High Blood Pressure Education and Control recommended using churches as HBP control centers.[12] Since then, church-based HBP control programs have been established in most regions of the country, as shown in the examples below.

- In Riverside, California, the Inland Counties Hypertension Control Coordinating Council has established a Black Church Task Force that has instituted church-based HBP control programs.

- In Georgia, the American Heart Association, Georgia Affiliate, has established a project that offers assistance to church-based HBP control programs.

- In Kansas, church-based HBP control programs have been established since 1972 in conjunction with a project initiated by the University of Kansas School of Medicine in Wichita.

- In Maryland, church-based HBP control programs have been established since 1979 in conjunction with the state health department, the American Heart Association, and the Maryland High Blood Pressure Coordinating Council, now called the Maryland Commission on High Blood Pressure and Related Cardiovascular Diseases.

- In Mississippi, Community Control of Hypertension, Central Mississippi, Inc., has initiated church-based HBP control programs.

- In North Carolina, the statewide Health and Human Services Project has mobilized churches to provide screening, counseling, and social support to members at risk for developing selected health conditions, including high blood pressure.[13]

- In Cleveland, Ohio, the Community Hypertension Program of the Mount Sinai Medical Center has involved more than 20 churches.

- In Rhode Island, the Health and Religion Project has trained volunteers to provide cardiovascular risk factor change programs, including high blood pressure control, within their own churches.[14]

- In Tennessee, the University of Tennessee has established a program called Church and Community United to Fight Hypertension.

Reports from these programs indicate that they have: reached many people who were unaware that they had high blood pressure; won the support of church leaders, volunteers, and congregations; and expanded to other churches.

Many of the guidelines in the following chapters are based on the experiences of these and other programs. It is hoped that this guide will help more religious institutions organize HBP control programs for the well-being of their own members as well as the community at large.

CHAPTER II
Planning a Church-Based High Blood Pressure Control Program

Getting started is the most challenging part of establishing a high blood pressure control program in a church, synagogue, or other place of worship. This is the time to get others involved, assign jobs, establish guidelines, and develop schedules. The basic planning steps follow.

A. Solicit participation.
B. Select a model for program design.
C. Obtain funding, equipment, and supplies.
D. Select a program coordinator.
E. Develop procedures for screening and referral.
F. Institute guidelines for followup activities.
G. Establish methods of program evaluation.
H. Recruit and train volunteers.
I. Develop a program schedule.

A. *Solicit Participation*

Church-based HBP programs are usually established in one of two ways: either a community or state health organization solicits a church's participation, or the church itself generates the idea and seeks assistance from other community health organizations.

Soliciting Church Participation

If the impetus for establishing a church-based HBP program comes from a community or state health organization, that organization must solicit the cooperation of local ministries. It is extremely important to involve the priest, minister, or rabbi and other key leaders directly at the early stages of planning, according to reports from many established programs. Specifically, these programs reported that cooperation of the congregations came quickly once church leaders were committed to the program.[15]

The first step in soliciting church participation is to call or write the priest, minister, or rabbi. Explain the prevalence and risks of high blood pressure and why churches are in an ideal position to help. Some programs have developed questionnaires for church leaders to complete. These forms collect information about current services provided by the church, the composition of its membership, and its organizational structure. (See exhibit 1 for sample letter to ministers and exhibit 2 for sample church questionnaire.)

Although it is essential to obtain the consent and support of church ministers, these individuals usually have many demands made upon their time and are often unavailable. Follow up the initial letter with a call to the church secretary, who may be able to help establish contact with the minister. If still unable to reach a particular minister, redraft the letter, and send it to the chair of the church's governing body.

Understanding the internal and social organization of the religious institution is an important factor in initiating a program. Most churches and synagogues have governing bodies such as boards of deacons, trustees, or directors. In addition, they usually have auxiliaries such as choirs, youth groups, senior groups, pastor aide societies, sick and shut-in committees, welfare committees, birthday clubs, sisterhoods, and brotherhoods. Many members belong to, and can be reached through, at least one of these subgroups.

Whether through informal discussion or by questionnaire, try to find the answers to the following questions.

- Is another health organization already working with this congregation?
- Is the church known for its interest in community welfare?
- Does the church have a health guild or committee? Who coordinates the health interests of the congregation?
- How are committees organized? How many members do they have, and how often do they meet?
- Are there health professionals (e.g., doctors, nurses, health educators) among the congregation?
- Are there other members such as an Urban League leader who could link the church with community resources?
- What is the composition of the membership (e.g., race, sex, high-risk population)?
- Have any members of the congregation been affected by high blood pressure (i.e., heart disease, stroke, kidney disease)?

Once you have this information, develop a profile of the institution. (See exhibit 3.) The profile should include information to help plan program support. The profile should include the name and telephone number of a contact person, the number of congregation

Exhibit 1

Sample Letter to Ministers

Dear [*Name of Minister*]:

Your church has a unique opportunity to help control one of the most widespread health problems facing our country today — high blood pressure. Some 58 million Americans have high blood pressure, which is a major cause of heart disease, stroke, and kidney disease.

Black people are more likely to have high blood pressure than any other racial group. One in every three blacks has the disease, compared to one in four of the general population. But anyone, black or white, young or old, can have high blood pressure. Alarming as the situation seems, this disease can be controlled, and many deaths can be prevented if high blood pressure is detected early and treated. The challenge lies in reaching the people who have it and directing them to doctors or health clinics for treatment.

Your church can help control this serious disease by starting a high blood pressure control program as a public service to your congregation and the community.

For more information, please complete the enclosed questionnaire and mail it to:

[*Name and Address of Health Organization*]

Thank you for your attention. I look forward to hearing from you.

Sincerely,

[*Name and Position of Contact Person at Health Organization*]

Exhibit 2

Sample Church Questionnaire

Name of Church: _____

Address: _____

Telephone Number: (_____) _____

Minister: _____

Contact Person: _____

1. What health-related activities has your church sponsored over the last year?

_____

_____

	Yes	No
2. Is your church now involved in providing high blood pressure (HBP) control services?	☐	☐
	(Go to #3)	(Go to #6)
3. If so, which of the following services does your church provide?		
a. Detection/screening	☐	☐
b. Public awareness and education	☐	☐
c. Professional education	☐	☐
d. Coordination of planning of high blood pressure program	☐	☐
e. Blood pressure checks for patients on treatment	☐	☐
f. Patient education	☐	☐
g. Referral for diagnosis and treatment	☐	☐
h. Referral followup	☐	☐

4. How many persons does your church HBP program reach each month? _____
5. In which neighborhoods does your program provide HBP services?

_____

_____

_____

_____

(Now, please skip to question #7)

6. Would your church be interested in providing high blood pressure control services? ☐ ☐
7. How large is the active membership of your congregation?
   ☐ Less than 75 ☐ 75-150 ☐ 151-250 ☐ 251-350 ☐ 351-500 ☐ More than 500
8. What percentages of your members are in the following age ranges?
   ☐ Younger than 14 ☐ 14-18 ☐ 19-24 ☐ 25-44 ☐ 45-65 ☐ Older than 65
9. How often does your church hold worship services?
   ☐ Weekly ☐ Twice a Month ☐ Monthly ☐ Other
10. What percentage of your congregation is male? _____ Female? _____
11. List the subgroups within the church and when they meet.

    Circles: _____

    Committees: _____

    Choirs: _____

    Prayer Groups: _____

    Other: _____

Exhibit 2 *(continued)*

12. Describe past and present activities that your church has offered, including who was responsible for them and how they were received.

    a. Educational sources on a health topic (e.g., stress management, cancer, nutrition):

    _____

    _____

    _____

    b. Outreach into the local community: _____

    _____

    c. Training programs (e.g., CPR training, counseling skills): _____

    _____

    d. Recreation or exercise programs: _____

    _____

    e. Support groups (e.g., divorce, diabetes): _____

    _____

    f. Weekend retreats: _____

    _____

    g. Visiting by lay people: _____

    _____

    h. Potluck dinners: _____

    _____

13. Describe your church's relationship to other community organizations, such as hospitals, mental health agencies, etc.

    _____

    _____

    _____

    _____

    _____

    _____

Please mail to: [*Name and Address of Health Organization*]

Thank you.

members, and a list of the kinds of activities (e.g., public education, screening, referral and followup, monitoring) that the church would like to sponsor.

Soliciting the Support of Health Organizations

Most existing church-based HBP programs work with state or community organizations — e.g., the local or state health department, the local affiliate of the American Heart Association, the local chapter of the American Red Cross, a community health center. These groups can help train volunteers, obtain equipment and educational materials, and involve local doctors and clinics. The following steps provide details on soliciting the support of health organizations.

- Draft a letter to the directors of local health care resources (e.g., director of the local affiliate of the American Heart Association or American Red Cross, the health educator in the state health department). This letter should explain the church's interest in implementing a HBP control program in its congregation. It should include basic information about the church or synagogue such as the size and composition of its membership and the types of activities it hopes to sponsor. The letter should also stress the importance of the medical and religious community working cooperatively to establish the most appropriate type of program for the community.

- Prepare a questionnaire that will help determine the interest of each health organization in participating in a church-based HBP control program, the types of services it can offer, and the manner in which these services will be coordinated.

- Develop a checklist of questions that must be answered in planning a strategy for interviewing health care professionals in local service organizations. Try to find out how the agency is organized and who will be the liaison for the program. Ask if there are health care professionals within the agency who can participate in program activities as trainers, screeners, or counselors. Determine if the organization has worked with church-based programs before and, if so, in what capacity. Discuss the organizational model the church plans to use in coordinating the program. (The three common models for church-based HBP programs are described in step B.)

- After an organization has answered the letter, verbally confirm the types of services it offers. Then develop an organizational profile that provides information crucial to planning. Include the name and telephone number of your contact at the health organization, the types of services it will provide, and the way it will coordinate its services with your activities.

B. *Select a Model for Program Design*

There are three common models for church-based HBP control programs.[16]

- *In-House Model.* The church or synagogue is responsible for its HBP control program and carries out the program through its members. Community or state health organizations generally support in-house models by providing training and possibly equipment.

- *Shared-Service Model.* Two or more religious institutions in the community share resources for the HBP control program. Again, state or community agencies play an important role by providing training support, linking churches, and assisting in liaison activities.

- *Community Resource Model.* A state or community agency (e.g., a local or state affiliate of the American Heart Association, an organization of public health nurses) works in cooperation with churches, which delegate members to work with the agency to plan and operate the program.

All three models can succeed. The most suitable model for a particular program will depend upon the number, type, and resources of churches and health organizations in the community. Regardless of which model is chosen, the churches will provide certain resources and community organizations will provide others. (See exhibit 4.)

C. *Obtain Funding, Equipment, and Supplies*

Church-based HBP programs require funds to: (1) purchase or lease blood pressure measurement equip-

Exhibit 3

Sample Church Profile

Church Information

Church Name _____ Denomination _____

Address _____

_____

County _____ Contact Telephone Number _____

Church Coordinator _____ Number of Members _____

Number of Health Volunteers in Congregation:

M.D.'s _____ R.N.'s _____ L.P.N.'s _____ Health Educators _____

R.D.'s _____

Churchsite Planning Information

Model selected (circle one):
Community Resource In-House Shared Service

Activities planned (circle all appropriate):
Screening Education Referral/Followup Monitoring

A. Blood Pressure Screening

1. Date _____
   Time _____
   Number of Members _____
   Number of Screeners _____
2. Date _____
   Time _____
   Number of Members _____
   Number of Screeners _____
3. Date _____
   Time _____
   Number of Members _____
   Number of Screeners _____
4. Date _____
   Time _____
   Number of Members _____
   Number of Screeners _____

B. Education Materials (check what will be used and amount needed):

☐ Pamphlets (amount: _____)
☐ Film (title: _____)
☐ Posters (amount: _____)

C. Referral/Followup (check when completed):

☐ Notified local health department for recheck agreement
☐ Established referral blood pressure levels from state guidelines
☐ Instituted system for medical emergency referrals

ment; (2) photocopy forms and other materials; and (3) obtain educational materials. The question of funding must be addressed early in the planning phase in discussions with church leaders and health organization coordinators.

A survey of several large HBP control programs involving many churches found that funding was usually received from several sources.[15] The churches themselves and individual donors often supplied the funds. Other sources for funding included the cooperating health organizations and state and Federal agencies.

The following issues need to be considered when planning for funding.

- Are any organizations in the area willing to loan equipment?
- Can free educational materials be obtained? If so, are they available in large enough quantities for the numbers of people expected, or will you need to have them photocopied or reprinted? Are local organizations or businesses willing to donate photocopying or printing services?
- Would audiovisual materials be appropriate? Can the materials and necessary equipment be rented or borrowed instead of purchased?
- Does the city or county government have funds available for such programs?

D. *Select a Program Coordinator*

Each church-based HBP program needs to designate a single individual to be responsible for its organization and implementation. The program coordinator serves as a liaison between the church and health organizations, local health care providers, the church congregation, and the general public.

Carefully consider the qualifications of the individual selected to fill the crucial position of program coordinator. Potential candidates include church members who have played key roles in previous community and church activities and thus are already acquainted with the congregation. Other possible

Exhibit 4

Roles of the Church and Cooperating Health Organization in a HBP Control Program

Suggested Tasks for the Church

- Selecting a coordinator
- Recruiting volunteers to staff the screenings and monitorings
- Providing space for screening, monitoring, and educational activities
- Publicizing HBP control activities
- Maintaining confidential files with personal medical information of persons screened
- Making periodic reports to health agencies on numbers screened with confidential data on race, sex, age, etc.
- Obtaining funds for equipment, supplies, and educational materials

Suggested Tasks for the Health Organization

- Providing certified blood pressure measurement trainers
- Providing screening and followup guidelines
- Encouraging doctors and clinics to accept referrals from the program
- Identifying local treatment services
- Conducting continuing education classes to update volunteers
- Identifying sources of equipment, supplies, educational materials, and other resources

criteria for selection include the length of time that the candidate is likely to remain in the community as well as his or her willingness to devote sufficient time and energy to administering the program.[7]

The responsibilities of the program coordinator for the church-based HBP program generally include the following.

- Establishing and maintaining contact with interested church, civic, and community groups to ensure high visibility for the program.
- Establishing standardized procedures for screening, detection, referral, and followup.
- Maintaining contact with physicians, health departments, and other health care providers to facilitate referrals and followup.
- Recruiting and instructing volunteers in program objectives and procedures and blood pressure measurement techniques.
- Supervising the screenings and ensuring compliance with procedures for screening, referral, and follow-up.
- Helping to conduct screenings as necessary.
- Managing an inventory of needed equipment and supplies.
- Developing a patient education program that provides counseling about adherence to medication, diet, exercise, and other types of therapy.
- Evaluating the program periodically using routinely collected patient data.

Many of the duties of the program coordinator are discussed in greater detail in chapters III, IV, and V. In addition, local health organizations can be helpful in assisting coordinators in program planning, implementation, and evaluation.

E. *Develop Procedures for Screening and Referral*

The screening guidelines are a set of instructions to be followed by everyone involved in the screening process. These guidelines will make it easier for volunteers to do their jobs, and they help ensure that the program will get accurate blood pressure measurements and give appropriate referrals.

Guidelines for determining when blood pressure is high enough to warrant a referral to a physician have been developed by the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure (JNC). The JNC convened to advise the National High Blood Pressure Education Program (NHBPEP) on issues of HBP management and control. The report of this working group was disseminated to many practicing physicians and other health professionals participating in HBP control programs across the nation. Hence, this report provides guidelines not only for doctors treating patients but also for community groups such as churches that are conducting HBP control programs. The JNC guidelines are provided in chapter III.

Other organizations and programs have established guidelines for other procedures such as blood pressure measurement and counseling; examples are included in chapter III. Health agencies and organizations as well as physicians in the community may also be able to help establish guidelines; ask them for suggestions.

Screening for high blood pressure includes these activities.

- *Registration.* Decide what kind of forms need to be completed at registration. (See chapter III for more details.)
- *Measurement.* Use standard procedures for blood pressure measurement to make sure that results are accurate. (See chapter III for more details.)
- *Referral.* Use the JNC guidelines to decide when a person should be referred to a doctor, to a second screening, or, in very rare cases, to a hospital emergency room.
- *Counseling.* All volunteers need to know how to answer common questions about blood pressure and to explain what various readings mean. (See chapter III for more details, including an example of counseling guidelines.)

Also during the planning phase, compile a list of local doctors and health clinics that are willing to accept referrals from the church-based HBP program. Contact them directly to explain the purpose and date

of the screening and to discuss any tracking procedures that may involve them, such as mail-back cards to confirm appointments. If possible, involve doctors and clinics in the development of guidelines; at any rate, be sure they will accept the referral guidelines to be used by the program.

The counselors who will be making referrals will need a list of these doctors and clinics, complete with addresses and telephone numbers. Also compile information on future screening dates and locations, either at the church or elsewhere in the community, for those persons whose blood pressure readings indicate the need for monitoring. Be sure to update this information annually.

F. *Institute Guidelines for Followup Activities*

Screening is only the beginning of a HBP control program. Followup — that is, keeping in touch with the people with elevated readings — is also essential to a successful program. Often, people do not see a doctor without encouragement. Among those who *do* see a doctor and begin treatment, many stop taking their medicine after a period of time. Others may continue smoking or maintain unhealthy eating habits, and their blood pressure remains high and uncontrolled. A well-planned followup program involving personal contact and support can help church members keep their blood pressures under control.

At first, plans and guidelines may seem too formal an approach to this kind of personal interaction with church members. In the long run, however, these guidelines will help the program reach more of the congregation, more effectively, and they are not difficult to develop. Followup involves tracking, education, and support.

Tracking Guidelines

Tracking involves contacting those persons screened who had elevated blood pressure to encourage them to see a doctor and to adhere to prescribed treatments. Some refer to this as tracking or followup. During the planning phase, decide who will make followup contacts. In an in-house program, this person may be the program coordinator, church secretary, or volunteers. In a shared-service program, the various churches may take turns; and in a community resource program, personnel from the health organization may be able to help.

Decide how the contacts will be made. Many church HBP control programs have used telephone contacts, written reminders, postcards, and personal visits. Some programs give referred persons a card, which they take to the clinic or doctor to fill out on their first visit; either the patient or the doctor mails the card back to the program.

More information and examples of tracking guidelines and forms are provided in chapter IV. When developing a tracking system, consider these questions.

- When should contacts begin? (Most experts advise making the initial followup contact within a few days after screening.)
- How often should a person be contacted.
- Are enough volunteers available to make telephone contacts or personal visits?
- Are office services available for preparing and mailing letters?
- What kind of help is available from other resources?
- Are doctors and clinics in the area willing to participate in the tracking process?
- What kinds of forms and files will be needed?
- How will you ensure that the contacts and files are kept confidential?

Education and Support Activities

Education and support activities must be planned and coordinated as carefully as the screening component. Some programs organize in-house support groups for people with high blood pressure and arrange for educational activities on weight control, sodium reduction, smoking cessation, and exercise. Others refer patients to community resources or use a combination of in-house and community resources. This decision will depend on available resources in the congregation and in the rest of the community. The planning phase includes the following steps.

- Talk to leaders of existing groups in the church about activities related to blood pressure control; for example, a lunch for seniors could feature low-salt dishes.

- Organize special educational activities, such as lectures and films.
- Recruit a support group leader.
- Obtain educational materials.
- Recruit help from outside organizations such as speakers.
- Compile a list of outside community programs to which referrals can be made.
- Find out what research programs are available at local universities or doctor's offices (e.g., HBP trials, drug studies).

More detailed information on followup is given in chapter IV.

G. *Establish Methods of Program Evaluation*

Evaluation is an ongoing process that begins even before the first screening. During the planning phase, decide exactly what the program's goals are, how it will achieve those goals, and how to determine whether or not it has achieved them. These decisions are part of the evaluation process. All other aspects of evaluation — such as collecting, analyzing, and using information — should also be planned at this time.

Evaluation may sound technical, but a great deal of it is really common sense. Some sort of evaluation, even if not formally planned, takes place during any program. For example, is it taking more time to obtain educational materials than was allowed for in the schedule? How many people have been screened, and what percentage of the congregation is that? How many people with elevated readings actually went to a doctor or clinic after the screening? The program coordinator, minister, and volunteers will all be discussing questions such as these as a program progresses. A formal system of evaluation will provide dependable answers — answers that will help the program run more smoothly and accomplish more as time goes on.

Chapter V provides details on planning evaluation procedures for a church-based HBP program. Health organizations may also be able to help.

H. *Recruit and Train Volunteers*

Volunteers are essential to the success of a church-based high blood pressure control program. They conduct blood pressure screenings, provide referrals and educational programs to church members, publicize and organize program events, and recruit new volunteers. At screenings, volunteers perform many necessary functions in addition to blood pressure measurement. These duties include recordkeeping, directing persons to appropriate stations, and distributing educational and referral information. Volunteers also serve as intermediaries between the persons screened and the participating health professionals. They can set examples of health behavior and attitudes; and, with training, they can help other church members adopt and maintain healthy lifestyles.[14] Chapter III includes specific information on the roles to be filled by volunteers during screening.

Recruiting Volunteers

Church-based HBP control programs require approximately one volunteer blood pressure screener for every 20 to 50 church members, depending on how active the congregation is. Although the size of the church population will determine the number of screeners needed, most churches will need at least two trained and certified screeners. Screeners must have good hearing and vision in order to use the blood pressure measurement equipment properly and effectively. However, not all volunteers need to be trained in blood pressure measurement. Some will perform other necessary functions, such as publicizing screenings, making signs, directing people to appropriate stations, distributing educational materials, and recordkeeping. Encourage creativity and a sense of ownership of the project to foster loyalty.

Some churches select a lead volunteer (this may be the program coordinator in a small program) to be responsible for managing each screening event. If a large or lengthy screening is planned, two lead volunteers may be needed to work different areas or different shifts. If possible, lead volunteers should be health professionals (e.g., registered nurses) so they can help resolve technical problems or answer medical questions that arise. Or a health professional from the community or the cooperating health agency may be able to help.

When recruiting volunteers, consider a variety of congregation members. Teenagers and senior citizens

are often effective volunteers because they tend to be enthusiastic and able to devote considerable time to the HBP program. People with high blood pressure and their families may also be particularly motivated.[16] While it is helpful to have some volunteers who are very familiar with the church congregation, volunteer work is an excellent way for newcomers to become acquainted with the church and community. In addition, some church-based programs have effectively used allied health professions students as volunteers and found the arrangement beneficial to both students and churches.[7] Volunteer qualifications suggested by two different church-based programs are presented in exhibit 5.

Training Volunteers

Volunteers must be trained before screening can begin. Training sessions include blood pressure measurement, counseling and referral, use of audiovisual equipment, and other duties.

Most training programs are presented in a one-day seminar or in six or seven sessions, each no longer than 2 to 3 hours. To accommodate volunteers that work during the day, schedule sessions for evening hours near the church or immediately following church services as this allows for a "captive audience." Distribute handouts at the sessions to reinforce course content and serve as reference guides to program protocol.

Many local chapters of health organizations (e.g., the American Red Cross, the American Heart Association), state and local health departments, hospitals, and universities have developed courses in blood pressure measurement. (Appendix C contains the training program used by one HBP control program.) These courses usually include sessions on accurate blood pressure measurement, referral guidelines, and routine questions about high blood pressure. Churches can adapt these guidelines to their individual programs. Most courses include the following steps.

- Administer a pretest to determine the knowledge level and learning needs of volunteers.
- Introduce the HBP control program, and review the goals and objectives of the training.
- Introduce the general topic of high blood pressure: definition; common misconceptions; basic physiology and anatomy of the circulatory system; associated risks and risk factors; means of detection; importance of control; and types of treatment, including dietary regimens. (Audiovisual materials are valuable aids in presenting this topic.)
- Discuss systolic and diastolic blood pressure, and demonstrate the operation and maintenance of the blood pressure measurement equipment.
- Demonstrate blood pressure measurement techniques; have volunteers practice techniques on each other; and review common sources of error in measurement. (Again, audiovisual materials are valuable training tools.)

Exhibit 5

Volunteer Qualifications

- Good hearing and vision (only for blood pressure screeners)
- Ability to read and write
- Interest in the high blood pressure control program
- Ability to devote time required for training and for attending screenings on a regular basis (especially important for blood pressure screeners)
- Commitment to treat all personal medical information as confidential

- Test volunteers, and certify blood pressure measurement specialists.
- Demonstrate how to collect data, set up a record-keeping system, and complete screening data forms.
- Discuss referral criteria, and review list of doctors and clinics that will accept referrals.
- Coach volunteers in responding to routine questions about high blood pressure and its treatment.
- Review logistics for screening events, including responsibilities of volunteers.
- Conduct practice screening sessions.
- Administer a posttest to determine knowledge level of volunteers after training.

Experienced, trained volunteers are a valuable asset to a church-based HBP program. Plan ways to show the church's appreciation of the time and effort donated by volunteers. Examples include a feature article in the church newsletter and recognition during worship services.

Churches may want to conduct a short "graduation" ceremony, held during a worship service, for volunteers who have completed the training course. The ceremony not only rewards volunteers, but also provides publicity for and credibility to the HBP control program.[11] Some programs award certificates (a sample is shown in exhibit 6). An outside speaker could be invited to the ceremony to emphasize the importance of these volunteers.

I. *Develop a Program Schedule*

Developing a schedule is an important element in program planning. The program schedule should include both an annual plan for program activities as well as a detailed timeline for preparing and conducting each screening event and followup. Annual program scheduling should include plans for recruiting and training volunteers, conducting health education programs, establishing screening dates for the coming year, securing cooperation of health organizations and doctors, and performing annual program evaluations. Exhibit 7 provides a sample schedule for annual program planning.

Timetables for planning each screening event should begin at least 6 weeks prior to the actual screening. Preliminary tasks to be scheduled include ordering audiovisual and blood pressure measurement equipment and educational materials, selecting a screening site, publicizing the event, organizing screening logistics, and recruiting and training volunteers. Exhibit 8 contains a sample schedule for each screening event.

Conclusion

The planning phase of a HBP control program involves many considerations. Important facets of planning are: obtaining the commitment of others, both inside and outside the church; assigning tasks; arranging schedules; and developing guidelines. Respondents to a recent survey of church-based HBP control programs gave the following advice for successfully starting a program.[15]

- Involve ministers and other key church leaders.
- Work with health groups.
- Communicate with the medical community.
- Set firm schedules.
- Restrict class size during training.
- Support volunteers.
- Make sure volunteers understand their commitment.
- Provide guidelines.
- Provide adequate space and equipment.
- Provide information about risk factors.

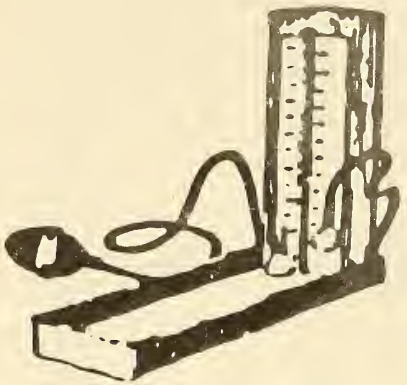
In addition, HBP control programs stress the need for planning followup, including continued monitoring, education, and support for those members of the congregation who have high blood pressure.

Exhibit 6

Sample Certificate of Appreciation and Accomplishment for Volunteers

A.C.T.S. Hypertension Program, Inc.
Prevention In The Minority Communities

Awards To



_____

This Certificate Of
High Blood Pressure Measurement Specialist
For

_____

_____
DATE

_____
PASTOR

CERTIFICATE NUMBER _____

Source: A.C.T.S. Hypertension Program, Inc.

Exhibit 7

Sample Schedule for Annual Program Planning

Month	Task
January:	If initiated by church: ● Select program coordinator ● Recruit volunteers ● Contact local health organizations/ agencies If initiated by health organization: ● Contact church officials ● Secure commitment ● Select program coordinator ● Recruit volunteers
February through March:	● Orient HBP coordinator ● Conduct training program ● Establish screening and recheck dates for year ● Gain cooperation of local doctors and clinics to provide followup screening and treatment ● Determine the number of volunteers needed ● Decide on education programs to be conducted ● Contact the NHBPEP for materials to promote National HBP Month, held in May every year (see appendix A for available resources)
April through October:	● Hold screening and education events ● Collect data on program achievements (and report to community or state agency if applicable)
November through December:	● Conduct year-end evaluation ● Hold volunteer recognition ceremony ● Assess needs for coming year
Year-round:	● Conduct followup ● Conduct regular rechecks of members with HBP

Source: Adapted from *The Church, High Blood Pressure, and the Community: Guidelines for a Church-Based Control Program*, American Heart Association, Georgia Affiliate.

Exhibit 8

Sample Timeline for Planning and Conducting a Screening Event

6 Weeks Before Screening Date
- Select appropriate location for screening
- Establish date and time for screening
- Establish dates, times, and location for volunteer training
- Order blood pressure measurement and audiovisual equipment
- Order audiovisual and printed educational materials
- Complete volunteer recruitment
- Ask lay leaders to spread the word about the screening

4 Weeks Before Screening Date
- Conduct volunteer orientation and training
- Obtain commitments from volunteers for screening date
- Plan details of the screening event and educational activities
- Place screening announcements in church bulletin and lobby

3 Weeks Before Screening Date
- Verify that necessary equipment for blood pressure measurement is available and in proper working order
- Organize reporting procedures and recordkeeping system
- Continue announcements in church bulletin and church lobby

2 Weeks Before Screening Date
- Have minister deliver sermon urging church members to take care of their health and have blood pressure measured
- Continue announcements in church bulletin and lobby
- Confirm procedures for both routine and emergency medical referral

Week of Screening Date
- Continue screening announcements from pulpit and in church bulletin and lobby
- Verify volunteer schedule
- Conduct screening according to schedule
- Collect and compile all necessary data according to procedures
- Verify that all persons with elevated blood pressures were referred for remeasurement

CHAPTER III
Implementing a Screening Event for High Blood Pressure Control

Now that the guidelines have been developed and the volunteers have been trained, the time has come to hold a screening. As with any church event, advance preparation is needed. The time, date, and location must be determined. The screening must be publicized to the congregation. Logistical details must be reviewed.

This chapter discusses the details of screening in the context of a specially scheduled screening event. However, not every screening needs to be a mass screening. Trained volunteers can measure blood pressure at smaller group meetings, such as a lunch for seniors or a church committee meeting.

The Screening Process

The screening process is usually divided into three stages: registration, measurement, and referral and counseling. Separate stations with tables, chairs, forms, and equipment may be set up for each of these, or, for very small groups, these stations can be combined into one.

Some possible layouts for the stations are shown in exhibit 9. Typical instructions for the volunteers at each station follow.

1. *Registration station.* Ask the person to be screened to fill out a form with name, address, and telephone number and to sign a statement giving permission to have his or her blood pressure measured. Registration forms often ask for other kinds of information such as personal and family history of high blood pressure, other cardiovascular risk factors (e.g., smoking), and other health problems; diet and exercise habits; and name of regular doctor, if any. Some examples of registration forms are shown in exhibits 10 and 11. General educational materials may be distributed at this station. After registering, the person proceeds to a waiting area. Some programs take advantage of this waiting time to show educational films on high blood pressure.

2. *Measurement station.* Blood pressure measurement may require one or several tables, depending on the size of the congregation and the number of screeners. Ideally, it should be far enough away from the busy registration and waiting areas to ensure confidentiality.

   Ask the person to sit down and roll up a sleeve, if he or she is wearing a long-sleeved shirt. The table should be high enough for the person to rest an elbow at heart level (desk height). Choose the appropriate cuff size (i.e., child, adult, large adult), and measure the blood pressure according to preestablished guidelines. (The American Heart Association's guidelines for blood pressure measurement are presented in exhibit 12.) Tell the person what the reading is, and enter the reading on the registration form as well as on a card for the person to keep.

3. *Referral and counseling station.* Anyone who has an elevated blood pressure reading at the screening station should be sent on to the referral station where a counselor, preferably a nurse or other health professional, does three things: rechecks the blood pressure, provides information and advice, and makes referrals to a doctor or clinic for remeasurement. The steps below are followed at the referral station.

   - Take a second reading a few minutes after the first blood pressure measurement to obtain an average.

   - Based on the two blood pressure readings and the JNC guidelines (see exhibit 13), recommend that the person either see a doctor or have blood pressure measured again within a specified amount of time. Messages at this stage must be carefully worded. It is not possible to diagnose high blood pressure at the screening site. High blood pressure can *only* be diagnosed by a doctor. An elevated reading on one occasion does not mean that a person has high blood pressure. However, be sure to state clearly to the person: (1) whether the reading is within normal limits or elevated; and (2) that an elevated reading requires further observation.

     Ask about previous treatment for high blood pressure, and tell the person about the benefits of control. Be prepared to answer routine questions. The guidelines for counseling will have been determined during the planning phase of the program and communicated to the volunteers during training; sample counseling guidelines are shown in exhibit 14.

Exhibit 9

Sample Layout of Screening Site

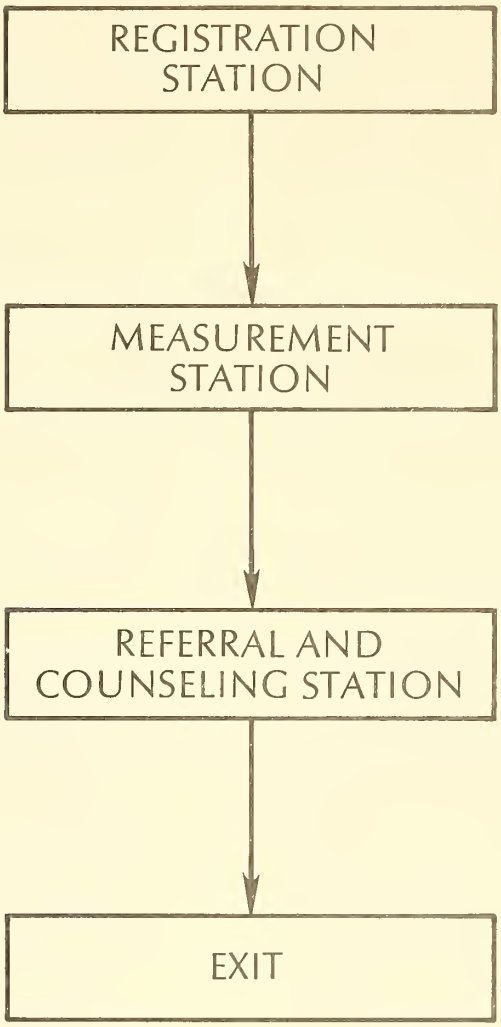


Exhibit 10

High Blood Pressure Education Program
Data Form

SAMPLE ONLY

(To be filled in by volunteer)

DATE: _____/_____/_____
DAY MONTH YEAR

IDENTIFICATION #: _____

LOCATION: _____

(To be filled in by client)

NAME: _____ SEX: _____
FIRST MIDDLE LAST

PHONE NUMBER: (_____) _____

1. Have you had your blood pressure checked in the last 12 months? ☐ Yes ☐ No

2. Have you ever been told that you have high blood pressure (hypertension)? ☐ Yes ☐ No

If yes, please circle the kinds of blood pressure treatment you are on:

Low-Sodium Diet Medicine Weight Loss Other

I hereby give permission to have my blood pressure measured for the purpose of detecting possible high blood pressure (hypertension). If my blood pressure is elevated, I understand that I shall be advised of such.

It is also my understanding that this information is confidential and will only be used by the American Heart Association, Nation's Capital Affiliate, for followup and program development and evaluation purposes.

_____
Signature (Mandatory)

American Heart Association
Nation's Capital Affiliate

TODAY'S READING

(To be filled in by volunteer)

BLOOD PRESSURE READINGS

Reading #1: _____/_____ (Left Arm Seated) _____ Screener's Initials
If Elevated:
Reading #2: _____/_____ (Left Arm Seated) _____ Screener's Initials
(5 minutes later)
Reading #3: _____/_____ (Left Arm Seated) _____ Screener's Initials
(5 minutes later)
_____ Average of 3 Readings

Referral Information (circle one): Referred Not Referred Rescreen

FUTURE READINGS

DATE	#1	#2	#3	AVERAGE OF 3 READINGS	COMMENTS

Source: American Heart Association, Nation's Capital Affiliate.

Exhibit 11

Patient Detection Form

This form includes the information needed for both long- and short-term tracking. Note right side of form, which shows outcome of patient contact.

Last Name First Name M.I.

☐☐☐☐ _____

Clinic No. I.D. No.

Home Address Street County/City and State Zip Home Phone

Work Address Street County/City and State Zip Work Phone

Date of Birth (M D Y) Race ☐☐☐ Sex ☐☐

Education ☐ Occupation ☐

Family Physician/Place of Medical Care Telephone Hospital I.D. No. ☐

Check *YES* or *NO* for each	H.B.P. Yes	H.B.P. No	High Chol. Yes	High Chol. No	Diabetes Yes	Diabetes No	Stroke Yes	Stroke No	Heart Attack Yes	Heart Attack No
Has your brother, sister, father, mother ever had										
Has a doctor ever told you that you had										
Has a doctor ever told you to take medicine for										
Are you now taking medicine for										
Has a doctor ever told you to go on a diet for										
Are you now on a diet for										

_____ Lbs. Weight (if taken)

_____ Ins. Height (if taken)

_____ Pulse

Do you smoke cigarettes? _____ Yes _____ No If "Yes," No. of Packs/Day _____

Are you currently taking birth control pills? _____ Yes _____ No

Large Cuff? _____ Yes _____ No

Blood Pressure _____ _____ _____

Average _____

Action Taken ☐ Yearly BP Checks (Normal BP)
☐ Referred (Elevated BP)
☐ Monitor (Borderline BP)

Frequency of Blood Pressure Checks _____ Date of Next Appt. _____

Name and Address of Place Referred _____ ☐☐

Comments _____

I give my permission to have my blood pressure taken for the purpose of detecting possible high blood pressure. I understand that this is a screening procedure only and is not meant to be a substitute for a complete medical examination. In the event that my blood pressure is found to be high today, I give my permission to give this information to my private M.D.

_____ _____
Signature Date

_____ _____
Witness (Screener) Date Screened

INTAKE FORM
MARYLAND STATE DEPARTMENT OF HEALTH AND MENTAL HYGIENE
HIGH BLOOD PRESSURE PROGRAM
DHMH 1271-A

☐☐☐☐ _____
Clinic I.D. No.

I. REFERRAL ACTIVITY

A. Copy of Referral given to Patient Date _____
B. Copy of Referral mailed to M.D./Clinic Date _____
C. Accompanied Patient to M.D./Clinic Date _____
D. M.D./Clinic Contacted by Phone Date _____

II. FOLLOW-UP ACTIVITY

A. No attempts made to contact patient.
B. Unable to contact patient/lost follow-up.
C. Deceased (cause, if known _____)
D. Patient Contacted

Dates Phoned & Time Letters Sent Home Visits

_____
_____
_____

III. REFERRAL OUTCOME

A. *Patient Response*
1. Saw M.D.
a. Discharged from care for high blood pressure
b. Under continuing care of M.D. for high blood pressure
c. Referred to _____
2. Did not see M.D. Reason _____
3. Refused follow-up.

B. *Physician Response*
1. Saw M.D.
a. Discharged. Required no further care for high blood pressure.
b. Under continuing care of M.D. for high blood pressure.
Referred to _____
2. Did not see M.D.

IV. BP MONITORING DATA

Date	BP	BP	BP	Avg. BP

FOLLOW-UP FORM
MARYLAND STATE DEPARTMENT
OF HEALTH AND MENTAL HYGIENE
HIGH BLOOD PRESSURE PROGRAM
DHMH 1271-B

Source: Maryland State Department of Health and Mental Hygiene.

Exhibit 12

Guidelines for Blood Pressure Measurement

POSITIONING THE PERSON

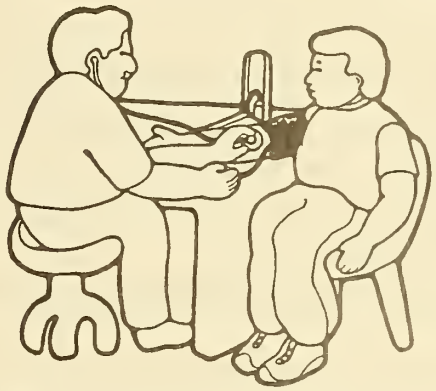
1. Have them sit in a chair with their feet flat on the floor.

2. Support the arm at mid-chest or heart level.

3. Find and count the pulse.

4. Locate the brachial pulse. If you cannot feel the pulse here, place the stethoscope in the middle of the elbow bend.

POINT TO REMEMBER! To avoid obtaining an incorrect blood pressure reading due to activity, have the person rest for at least 5 minutes.



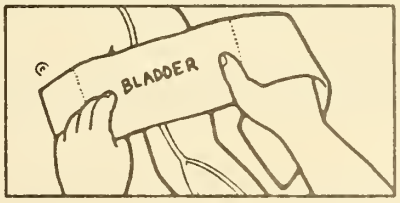
APPLYING THE CUFF

1. The cuff should be applied to bare skin — all clothing should be pushed or rolled up. The clothing should not be tight on the arm.

2. Measure for correct size.

3. After finding the center of cuff's bladder, position the cuff 1 inch above the area of the brachial pulse. (If unable to find it, just place the lower edge 1 inch above the bend of the elbow.)

4. Apply the cuff snuggly around the arm. Check to be sure it is snug.



ESTIMATING THE SYSTOLIC PRESSURE

1. Find the radial pulse.

2. While feeling the radial pulse, slowly pump up the cuff until you cannot feel a pulse.

3. Remember the number when you no longer felt the pulse. Let the air out of the cuff. This is the estimate of the systolic pressure.

Exhibit 12 *(continued)*

TAKING THE BLOOD PRESSURE READING

1. Put the stethoscope in your ears with eartips placed forward and down.

2. Find the brachial pulse, and place the stethoscope there. Hold the entire diaphragm down with light pressure.

3. Close the bulb valve, and rapidly fill the cuff with air to 30 mm Hg above the estimated systolic.

4. Slowly open the valve. Let the air out slowly at 2-4 mm Hg per second. Listen for the beginning of the tapping sound (systolic reading), and listen for the absence of sounds (diastolic reading).

5. Listen while going down at least 20 mm Hg below the last sound to make sure you have the correct diastolic reading.

6. Then, open the valve completely, and remove the cuff.

RECORDING THE READING

1. Remember the blood pressure reading. If in doubt, remeasure the blood pressure.

2. If the blood pressure is elevated and the person did not rest at least 5 minutes, ask him or her to wait, and remeasure the pressure after 5 minutes.

3. Record the reading in the proper space on the form and on the person's wallet card. If you make a referral or recommendation, be sure to note this also.

POINTS TO REMEMBER!

Once you begin to let air out, do not add more air without letting all the air out. Wait at least 30 seconds before starting again.

Let the air out at 2-4 mm Hg per second. Letting the air out too slowly can cause the diastolic reading to be wrong.

Source: *Church Blood Pressure Control Center Program: Blood Pressure Measurement Specialist Training Manual,* University of Kansas School of Medicine-Wichita, Division of Health Care Outreach.

Exhibit 13

Blood Pressure Classification* and Follow-Up Criteria

<table>
<tr><th rowspan="2">Diastolic Blood Pressure (mm Hg)</th><th colspan="4">Systolic Blood Pressure (mm Hg)</th></tr>
<tr><th>Less Than 140</th><th>140 to 159</th><th>160 to 199</th><th>200 or Greater</th></tr>
<tr><td rowspan="2">Less than 85</td><td>Normal Blood Pressure</td><td>Borderline Isolated Systolic Hypertension</td><td colspan="2">Isolated Systolic Hypertension</td></tr>
<tr><td>Recheck within 2 years+</td><td colspan="2">1st occasion: Confirm within 2 months
2nd occasion: Evaluate or refer promptly to a source of care</td><td>Evaluate or refer to a source of care within 2 weeks</td></tr>
<tr><td rowspan="2">85 to 89</td><td>High Normal Blood Pressure</td><td>Borderline Isolated Systolic Hypertension</td><td colspan="2">Isolated Systolic Hypertension</td></tr>
<tr><td>Recheck within 1 year</td><td colspan="2">1st occasion: Confirm within 2 months
2nd occasion: Evaluate or refer promptly to a source of care</td><td>Evaluate or refer to a source of care within 2 weeks</td></tr>
<tr><td>90 to 104</td><td>Mild Hypertension</td><td colspan="3">1st occasion: Confirm within 2 months
2nd occasion: Evaluate or refer promptly to a source of care</td></tr>
<tr><td>105 to 114</td><td>Moderate Hypertension</td><td colspan="3">Evaluate or refer to a source of care within 2 weeks</td></tr>
<tr><td>115 or greater</td><td>Severe Hypertension</td><td colspan="3">Evaluate or refer immediately to a source of care</td></tr>
</table>

*Based on the average of two or more measurements on two or more occasions.
+Rechecking within 1 year is recommended on second occasion and for individuals at increased risk (i.e., family history, obesity, blacks, oral contraceptive use, and high alcohol intake).

Source: *1984 Report of the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure*, National High Blood Pressure Education Program.

Exhibit 14

Sample Answers to Routine Questions

Questions About Screener's Technique

1. Q: Why are you taking my pressure on my left arm?
   A: I am following the recommendations from the District of Columbia High Blood Pressure Control Program. We do it this way to be consistent.

Answer any questions about your technique in this manner.

Questions About the Results of the Test

2. Q: My blood pressure goes up and down. Is that okay?
   A: I suggest you see your doctor to make sure. Your doctor will be able to make a judgment based on your blood pressure, medical history, family history, and general health condition.

3. Q: You say my blood pressure is high, but my doctor says it's normal. What's up?
   A: Most medical people consider blood pressure under 140/90 mm Hg to be desirable. You should discuss this with your doctor.

4. Q: Why is the reading that you got different from what my doctor found?
   A: Blood pressure changes all the time, depending upon your activities, like exercise and eating; the amount of rest you've had; and your emotional state. The difference in readings could be due to one of these factors.

5. Q: I don't have high blood pressure. You must not know what you are doing!
   A: This is how I was taught to take blood pressure measurements, and I am confident of my ability. Your pressure seems to be high today. However, for your peace of mind, why not have it taken by someone else, just to be sure?

Factors Related to High Blood Pressure

6. Q: Isn't hypertension like nervous tension?
   A: No, "hypertension" is the medical word for high blood pressure, which is a physical condition. In some cases, nervous tension can make blood pressure go up temporarily. Many calm and relaxed people have high blood pressure.

7. Q: Both of my parents have high blood pressure. Does that mean that I'll get it?
   A: There seems to be a family tendency, but it might not happen to you. With a family history of high blood pressure, though, it's even more important for you to get your pressure checked often.

8. Q: What does age have to do with high blood pressure?
   A: Blood pressure tends to go up a bit as people get older. However, high blood pressure can happen at any age, and controlling it within healthy limits is important at all ages.

9. Q: Do certain types of people get high blood pressure?
   A: Elderly people, black Americans, and people with a family history of high blood pressure are more likely to get high blood pressure, but it can happen to anyone. Everyone should have a blood pressure test at least once a year.

10. Q: Even if I have high blood pressure, nothing will happen to me while I'm young, will it?
    A: We can't be certain. We know that things like heart disease, stroke, kidney disease, and damage to the eyes are more likely to happen to people with high blood pressure at any age.

11. Q: What are the symptoms of high blood pressure?
    A: Usually, there are no symptoms. The only way to know whether you have high blood pressure is to get your pressure checked. If you have any symptoms you don't understand, such as dizziness, headache, or other problems, see your doctor.

Exhibit 14 *(continued)*

General Information About Blood Pressure

12. Q: What is blood pressure?
    A: It is the amount of force exerted by the blood inside the arteries as the heart pumps the blood through the body.

13. Q: What is normal blood pressure?
    A: To call any particular numbers "normal" is misleading. Blood pressure varies in people of different ages, sexes, and weights. However, the District of Columbia High Blood Pressure Control Program, using national standards, considers blood pressure of 140/90 mm Hg or higher to be above normal limits.

14. Q: Can low blood pressure cause problems?
    A: No, usually low blood pressure does not cause problems. However, if you feel weak, sluggish, dizzy or faint, or you get tired easily, or have any other condition that you don't understand, you should see a doctor.

15. Q: How can I have high blood pressure, when my doctor told me I have "low blood"?
    A: Your doctor might have meant that you have a low blood count, which is the number of red cells in your blood. The number of red cells has nothing to do with the force, or pressure, of the blood in the arteries. People can have a low blood count and high blood pressure at the same time.

16. Q: What do the two numbers mean?
    A: The first, or top, number is the pressure of the blood in the arteries as the heart beats. It is called the systolic pressure. The second, or bottom, number is the pressure while the heart rests between beats. It is called the diastolic pressure.

17. Q: Which of the two numbers is the most important?
    A: Both numbers are very important. The top number (systolic pressure) changes more quickly with activities and other conditions and may go up and down quite a bit in just a short time. The bottom number (diastolic pressure) changes more slowly; if it goes too high, it may be of concern because it generally will be slow to come back down again.

18. Q: What does high blood pressure do to the body?
    A: If it is not controlled, that is, brought down to healthier levels and kept there, it may contribute to heart failure, stroke, kidney disease, or damage to the eyes. However, if it is controlled at recommended levels, the person has no more risk of these problems than someone who never had high blood pressure.

19. Q: How is high blood pressure cured?
    A: There is usually no cure for high blood pressure. About 10 percent of the cases have a cause that can be identified and some can be cured. In 90 percent of the cases, high blood pressure can be controlled but not cured. Treatment is usually a lifelong process, and people can live full and useful lives.

Treatment for High Blood Pressure

20. Q: How is high blood pressure treated?
    A: The doctor and the patient should work together to design a treatment plan. A diet to reduce weight and cut down on salt intake is often prescribed. In some cases, medication may also be prescribed as part of the treatment.

21. Q: Why shouldn't a person drink alcohol while he or she is on medications?
    A: Alcohol is a drug and can interact with medicines in ways that might be dangerous. You should talk to your pharmacist or doctor before mixing alcohol and any medicines.

22. Q: When may I stop taking my medications?
    A: Don't stop or change any part of your treatment without talking it over with your doctor. Once medication has been prescribed, it must be taken regularly.

Exhibit 14 *(continued)*

23. Q: My blood pressure is down now. Can I stop taking the medication?
    A: No! Your pressure is down because you've been taking your medicine. If you stop taking it, your pressure will probably go up again. If you have any questions about your medicine or any other part of your treatment, talk to your doctor.

24. Q: I take my medicine when my pressure is up.
    A: It is important to take your medicine regularly, so your pressure won't go up. Also, unless you have your pressure measured, you can't be absolutely sure whether your pressure is up or not.

25. Q: I feel side effects from the medicine.
    A: That sometimes happens. Write down the problems you are having, then telephone or go see your doctor and tell him or her all of the problems. Your doctor may decide to change your prescription. **Don't stop taking your medicine on your own!**

26. Q: I take a lot of medicines. Is that dangerous?
    A: There are several reasons why this might occur; you should talk to your doctor about it. It might be because of overweight, eating too much salt, not getting enough exercise, or having too much stress. Or it might be that you would benefit from a different medicine or a different dosage of medicine. It is important for you and your doctor to work together to bring your blood pressure under control.

Note that whenever you are asked questions about an individual case, especially questions about treatments or medications, you must always urge the client to consult the doctor.

Miscellaneous

27. Q: I don't like my doctor. I don't trust what my doctor says.
    A: Have you thought about getting a second opinion or seeing a different doctor? It is important that you work with a doctor to keep your blood pressure under control.

28. Q: I know my pressure is up today. I had a lot of salty food (or a lot to drink, etc.) over the weekend.
    A: Everyone slips up now and then. However, it is very important for you to take care of yourself. It's up to you to do the best you can to stay away from things that make your pressure go up.

29. Q: I know I have high blood pressure, but I don't care.
    A: There are others who care and who do not want you to be in danger of heart disease, stroke, or kidney damage. It is important for you to take care of yourself.

Source: Adapted from *Blood Pressure Screener Manual*, American Red Cross, District of Columbia Chapter, Washington, D.C..

- Refer the person to a second screening or to his or her regular source of health care. If the person has no such source, ask whether a private doctor or clinic is preferred. Have on hand a list of doctors and clinics in the area who are aware of the program and have agreed to accept referrals. Also, be prepared to give directions for getting to the clinic or doctor's office and to discuss public transportation. On rare occasions, when a blood pressure reading is very high, it may be necessary to send someone to a hospital emergency room.

Again, the guidelines for referral will have been discussed with volunteers during training.

Exhibit 15 summarizes the screening process.

Date, Time, and Location

Schedule the screening on a day and during a time when most members will be able to attend. For example, you may want to have the screening follow a worship service or take place during another special event that is popular with the congregation.

Choose a location that is large enough to hold the expected crowd and that will allow for spontaneous socializing among congregation members before and after the screening. If unable to hold the screening at a site that meets all of these requirements, choose a place that is well-known and readily accessible to the members — one where they will feel comfortable waiting. Many questions must be considered. Is the place easy to reach by public transportation or by car? Is there ample parking? Is the location close to the church? Are there stairs or other barriers that would prevent elderly or physically disabled persons from coming? Are rest rooms available?

Once a space has been located, examine the physical layout.

- Will there be enough chairs and tables? Tables and chairs will be needed as people register as well as when people are having their blood pressure measured. Chairs are also needed for those people waiting to be screened. It is important that people sit quietly for several minutes before their blood pressure is measured.
- Is there a section of the room that can be designated as the screening area? Choose an area away from the registration and reception area. Having quiet and privacy during the blood pressure measurement will allow for a more accurate reading.

When setting up the screening area, try to give it an orderly, professional appearance — labeled screening stations, name tags and perhaps special armbands for volunteers, signs to reinforce verbal directions, and a well-defined waiting area with reading materials. All of these can help give both participants and volunteers a sense of confidence in the screening process.

Promotion

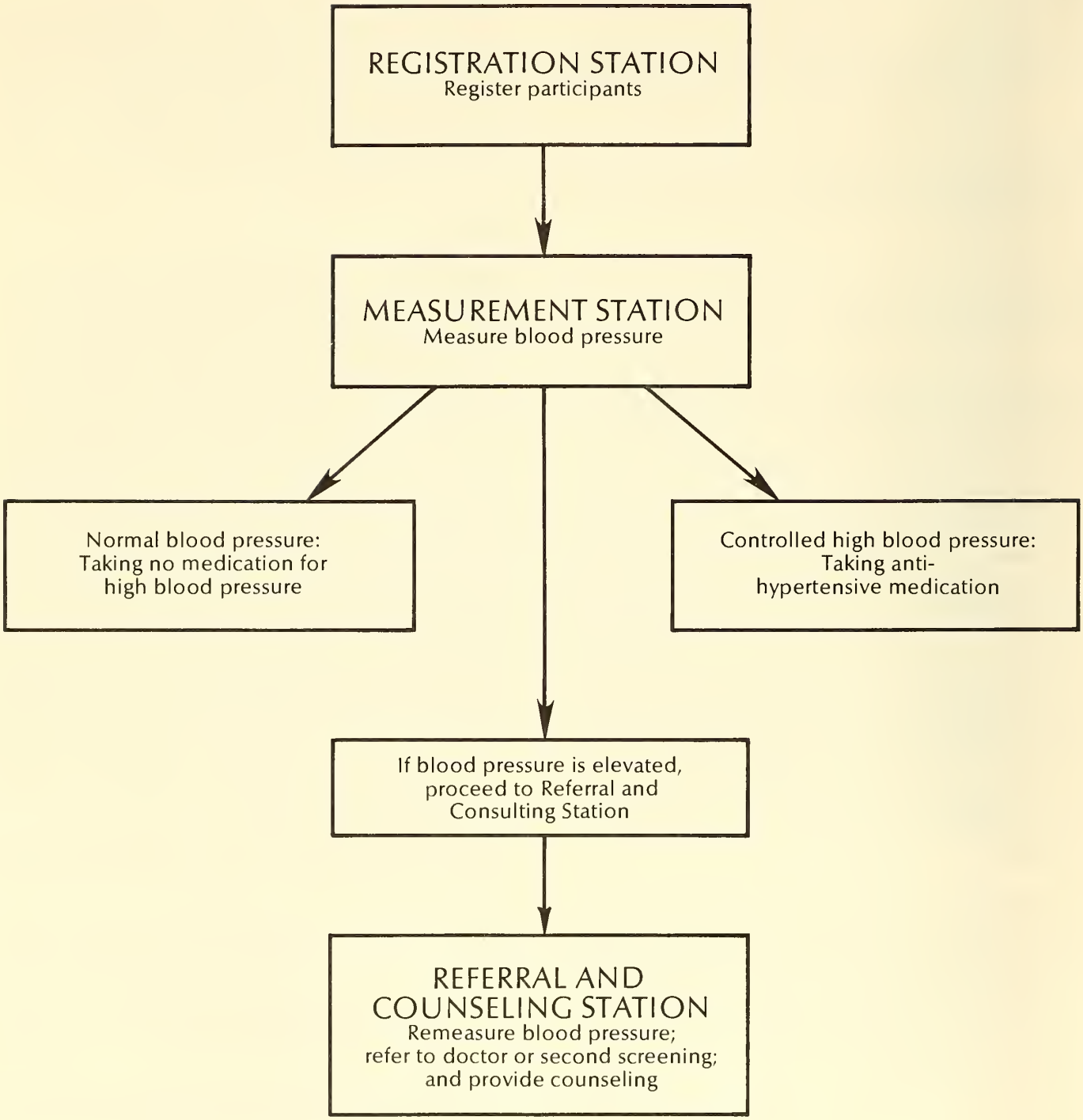
Remember to announce the date, time, and location of the screening to the congregation several weeks before the event. In a small congregation, volunteers may be able to call members. Announcements can be made during worship services, in the church or synagogue bulletin, and perhaps by an exhibit or poster in the entrance. The minister plays a crucial role in promoting the program. Ideally, he or she will deliver a sermon about the high blood pressure control program several weeks before the screening. And don't forget the most important strategy, word of mouth. Ask lay leaders to promote the screening to other members whenever possible. Remind members to bring other family members who may not regularly attend services to the screening. For example, grandparents can encourage teenagers and young adults to come.

Announcements and conversations about the screening should convey several important messages.

- Blood pressure measurement is painless.
- It takes only a few minutes.
- It is free, voluntary, and the results are completely confidential.
- High blood pressure affects one out of four Americans and one out of every three black Americans.
- Uncontrolled high blood pressure can lead to heart disease, stroke, and kidney disease.
- High blood pressure has no symptoms; blood pressure must be measured to determine if it is high.

Exhibit 15

Screening Process Flowchart



- High blood pressure cannot be cured, but it can be controlled through medication and lifestyle changes.

Staffing

Assign duties and plan volunteer schedules at least 4 weeks before the date of the screening. Ask volunteers to provide a minimum of 24 hours' notice if unable to attend the screening event; plan for backup volunteers.

Staffing Ratios

The number of volunteers needed will depend on the number of church members to be screened. Exhibit 16 provides ratios for staffing the screening. The staffing ratio is based on the fact that one volunteer can screen approximately 15 to 18 persons per hour. For large screenings, you may want to add an additional volunteer as a traffic flow coordinator. This person assists church members through the screening process. The flow coordinator could also serve as a relief person for volunteers. Volunteers should take 10-minute breaks each hour and, ideally, should work no longer than 2-hour shifts. People can make mistakes in measuring blood pressure if they become tired.

Staff Roles

Not all volunteers will measure blood pressure. Some will serve as registrars and counselors. The duties of each volunteer follow.

- *Registrars*

  Assist persons with completing registration forms

  Remind persons to sit quietly (and not to smoke) before having their blood pressures measured

  Direct persons waiting to the next available screener

- *Screeners*

  Measure blood pressures using preestablished guidelines

  Answer questions and explain blood pressure readings

  Record blood pressure measurements on screening forms

Exhibit 16

Sample Staffing Ratio

To screen 50 to 100 persons per hour:

2 registrars are needed at the registration station

5 blood pressure measurement specialists are needed at the screening station

2 health professionals/counselors are needed at the referral station

To screen fewer than 50 persons per hour:

1 registrar is needed at the registration station

2 to 3 blood pressure measurement specialists are needed at the screening station

1 health professional/counselor is needed at the referral station

Refer persons with elevated pressures (or pressures that are uninterpretable or difficult to hear) to the health professional at the referral station

Hold all screening forms in a confidential folder, and return to volunteer coordinator

- *Counselors*

Remeasure blood pressure of persons with elevated readings

Answer questions, and explain the role of medication and lifestyle changes in high blood pressure control

Make referrals to doctors or clinics

Hold all screening forms in a confidential folder, and return to volunteer coordinator.

Measurement Equipment and Supplies

Of the equipment and supplies needed at the screening and monitoring sites, the most important are the blood pressure measurement devices: sphygmomanometers and stethoscopes. The sphygmomanometer consists of a compression bladder enclosed in an unyielding cuff; an inflating bulb, pump, or other device to increase pressure; a controlled exhaust to deflate the system; and a manometer from which the applied pressure is read.

Three types of sphygmomanometers are available: mercury, aneroid, and electronic.

The *mercury* blood pressure monitor uses a column of mercury to measure blood pressure and is the type often used in doctors' offices. Although the mercury sphygmomanometer is the standard against which all other measurement devices are compared,[17] it should not be used when portable devices are needed because of the danger of mercury spills.

Community programs often use an *aneroid* ("without liquid") device to measure blood pressure. Aneroid sphygmomanometers are simple, mechanical devices that require users to read the blood pressure on a gauge dial. However, do not use an aneroid gauge with a hidden stop pin near the zero point on the dial. This feature can hide the need for readjustment.

Electronic blood pressure monitors are battery-operated units that show blood pressure on a digital display. These digital-readout models are the easiest to use, but are not as accurate as the mercury and aneroid devices.[18]

A *stethoscope* is a device that detects the sound of blood as it moves in the artery. For training purposes, a dual-headed stethoscope should be used so that instructors can verify the accuracy of measurements. A dual-headed stethoscope is also useful at small screenings as an interest grabber that allows people to hear their own blood pressure. Both hard and soft earpieces should be available for the stethoscope to accommodate individual comfort and preference. Electronic blood pressure measurement devices use a built-in microphone to detect sound.

Sphygmomanometers have to be calibrated regularly to ensure accuracy, and other equipment should also be inspected for proper functioning. Have the equipment checked shortly before the screening event, and, if it is to be used frequently, every 3 months thereafter. Broken parts can be replaced. Have bulbs, stopcocks, and gauges on hand in case they are needed. In addition, cuffs can be removed periodically from the rubber bladder and laundered. The equipment used by one church-based hypertension control program is shown in exhibit 17.

Other essential supplies include tables and chairs, which should be of a height that allows the screenee to rest an elbow on the table at heart level, about the average height of a desk. Several sizes of cuffs (e.g., child, adult, large adult) should be available. Portable screens are sometimes provided for privacy. Plenty of forms and pens should be at hand, and educational materials should be prominently displayed.

Forms

The use of forms during the screening process will depend somewhat on the program design and size. In general, one form is needed for the person being screened to take home and another for the program to keep. Information that is essential for the person screened to keep includes blood pressure reading; date; recommended action; and referral made, if any.

Some programs include brief educational messages on the risks of uncontrolled high blood pressure.

Important information for the program to keep about each person screened includes all of the above information as well as:

- Name, address, and telephone number

- Whether the person was taking medicine for high blood pressure at the time of the screening
- Whether the person had controlled high blood pressure at the time of the screening
- The signature of the person screened, giving permission for the screening procedure and for follow-up contact.

Some programs use three-part forms — one part for the person being screened, one for the program's records, and one for the cooperating health organization's records. Others use two different forms — one that the patient keeps (or takes to the doctor) and one for the program's records.

Educational Materials

All individuals screened should be given a pamphlet or form with their blood pressure measurement recorded on it. The screener should spend a few minutes with each person explaining what the blood pressure measurement means and answering any questions. This interview should be reinforced with basic high blood pressure education materials, such as pamphlets and handouts. Persons with elevated blood pressures requiring further care should be given additional materials that have a patient education orientation and emphasize methods of control and the importance of adherence to therapy.

Numerous sources provide free or low-cost materials. (See appendix A.) Try to select those materials that will be most meaningful to the congregation. Some educational materials are written especially for young adults, older people, a particular minority group, or people with low reading levels. Detailed information on selecting materials is available in the publication, *Printed Aids for High Blood Pressure Education: A Guide to Evaluated Publications*. (See appendix A.)

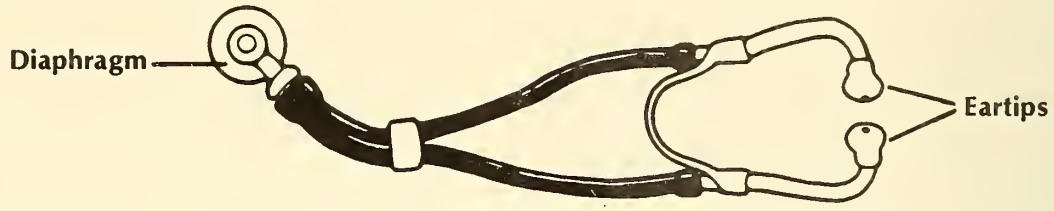
Be sure to order publications *at least* 6 weeks before the date of the screening event. Order enough basic pamphlets to distribute to every person being screened. In addition, order a smaller quantity of more detailed pamphlets for persons referred to further care.

Although government publications are often free, they may be available only in limited quantities. However, they are not copyrighted and may be reproduced. Local printers or other businesses may subsidize the cost of printing as a community service. Allow several extra weeks if you are having materials reprinted.

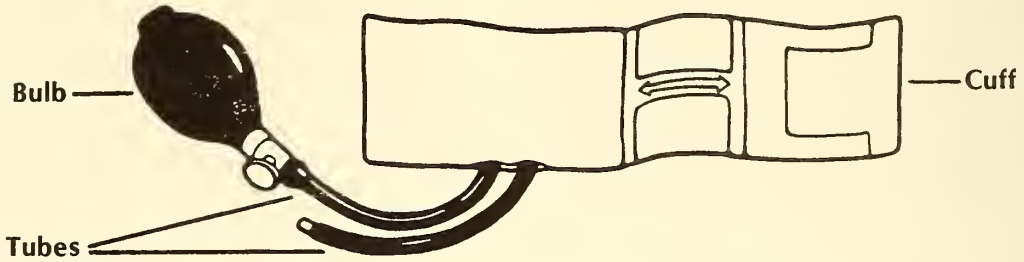
Exhibit 17

Equipment Used to Take Blood Pressure

STETHOSCOPE
The stethoscope is the instrument for listening to body sounds. The head, also called the diaphragm, should be applied with light pressure to prevent distortion of sounds. The eartips are placed in the ears pointing forward and down. When listening with the stethoscope, be certain it does not touch any other object so that a clear, true sound can be heard.



SPHYGMOMANOMETER
The sphygmomanometer (pronounced sfig-mo-man-ah-meter) is the instrument for measuring blood pressure. It has several parts as shown below.



The two types are aneroid (dial) and mercury. The markings represent millimeters of mercury (abbreviated as mm or mm Hg). Each long mark is 10 mm Hg, and each small mark is 2 mm Hg.

ANEROID GAUGE
The needle must be on zero to get a correct reading. If it is not, the reading will be wrong. Check to be sure all air is out of the cuff as this will cause the needle to be above zero.

If all air is out and the dial still reads above zero, the instrument needs to be repaired. Do not use it until after it is repaired. The coordinator will take care of this.

CUFF
Both mercury and aneroid sphygmomanometers use a cuff that encirlces the upper arm. It contains a rubber bladder that inflates like a balloon when the bulb valve is closed and air is pumped into it. It is covered with nylon or cotton material. The correct cuff size must be used to ensure an accurate measurement.

There are two tubes that lead from the rubber bladder. One goes to the manometer and the other to the bulb. The bulb is closed when pumping air into the rubber bladder. The rubber bladder is deflated by opening the control valve.

Source: *Church Blood Pressure Control Center Program: Blood Pressure Measurement Specialist Training Manual*, University of Kansas School of Medicine-Wichita, Division of Health Care Outreach.

CHAPTER IV
Followup Activities

Screening is only the beginning. Following up the screening with individual contacts, education, and support is a vital part of high blood pressure control. The weeks and months after screening are the times when many people with high blood pressure drop out of treatment. The reasons vary. Money problems or cultural barriers such as language may make people reluctant to call for the first appointment. Once persons begin treatment, HBP medicines may produce side effects that make patients stop taking them. It is hard to make changes in diet, exercise, and smoking habits, and lack of support from family and friends can make such changes even more difficult. These barriers may be overcome with the help of a carefully planned and implemented followup program.

Followup involves patient tracking, education, and support. *Tracking* includes maintaining regular contact with the patient to encourage him or her to make and keep appointments with a doctor or clinic. *Education* addresses the how's and why's of controlling high blood pressure, including making necessary dietary changes, quitting smoking, exercising regularly, and taking prescribed medicine. *Support* involves helping patients adhere to long-term therapy. Support often is offered through a support group, consisting of people with high blood pressure who meet regularly to share problems and discuss the ways they have found to cope with them.

Patient Tracking

The importance of tracking cannot be overemphasized. One study showed that 95 percent of persons referred to doctors because of an elevated blood pressure measurement do keep their appointments if someone contacts them shortly after a screening. However, if no one makes contact within a week, the proportion of those seeing a physician drops to only 50 percent.[9]

The planning phase of the church-based HBP program is the time to determine who will contact referred persons and how such followup will be conducted (see chapter II). Some programs have used the methods described below.

- *Telephone.* Volunteers, the church secretary, or staff members of the cooperating health organization call people who were referred to a doctor because of an elevated blood pressure. They remind them of the importance of making an appointment, if one has not yet been made. Exhibit 18 provides sample telephone guidelines.

- *Mail.* A letter or postcard is sent to people who were referred to a doctor to remind them to make and keep an appointment. Exhibit 19 provides a sample reminder letter. Again, this letter may be sent by a volunteer or a staff member of the church or cooperating health organization.

- *Mail-back card.* A postcard requesting specific information is given to people with elevated blood pressures at the screening. They take this card with them to the doctor or clinic, where it is filled in and then mailed back to the program by the patient or doctor. Exhibit 20 provides a sample reminder mail-back card.

- *In-person visits.* In small congregations or in unusual cases, volunteers sometimes visit referred people in their homes to encourage them to see a doctor for diagnosis.

- *Rechecks.* Setting up sites for monitoring blood pressure and support counseling offers yet another way of encouraging referred individuals to see a doctor.

Regardless of the method used, referral guidelines need to be developed during the planning stage of the program. The following steps should be taken the week after the screening.

- *Coordination.* Get the screening forms to the volunteers making the followup contacts, and discuss timing. Make sure each volunteer has a copy of the followup guidelines.

- *Recordkeeping.* Keep track of contacts. (Forms and filing are discussed in the following paragraphs.)

- *Problem Solving.* Decide how best to handle cases in which you cannot make contact, basing your decisions on the established guidelines whenever possible.

Forms and Filing

After the screening event, the forms completed for each person screened should be returned to the volunteer responsible for followup. This volunteer might

Exhibit 18

Sample Guidelines for Making Followup Phone Calls

Thank you very much for helping the Heart Association to help people protect their health.

Here are some tips to guide you in your very rewarding work.

1. Introduce yourself: "Hello, I'm _____ *(your name)* _____ . May I speak to _____ *(name of screenee)* _____ , please."

2. Tell screenees what you're calling for: "I'm helping the Heart Association in its followup of people who were tested at _____ some time ago. Our records show that you were sent a note asking you to see a doctor to double-check on your test results. We were wondering if you received the note and if you had a chance to see a doctor."

3. It's all right to tell screenees that their blood pressure should be rechecked.

4. Never say or imply that something is wrong. Do not use words such as "normal" or "abnormal."

5. Never prescribe for screenees. Always encourage them to see their doctor, because only their doctor can make an evaluation.

6. If people ask you to recommend a doctor, give them the telephone number of the county medical society, which will give them the names of doctors in their area.

7. If screenees cannot afford a doctor, refer them to the counselor at the state department of vocational rehabilitation, the county health department, or the county department of social services. Some communities have a referral service that might be helpful. The Heart Association does not have funds for providing medical treatment or drugs.

8. Most calls will probably last about 3 minutes. Try to confine the conversation to "Have you seen a doctor?/I hope you will see a doctor."

9. If screenees are not home on your first attempt, do not leave your number for a return call. Instead, find out when they will return, and call back. If you are asked for your name, give it, and say that you are helping out on a Heart Association health program.

10. Report the results of all your calls on the forms provided by the Heart Association. If you've made repeated calls but have been unable to contact the screenee, note this also.

    For brevity and uniformity, write one of the following at the bottom of the screenee's form:

    1 — has already seen a doctor/is new case
    2 — has already seen a doctor/is old case
    3 — has already seen a doctor/tested normal
    4 — has not seen a doctor but has already made an appointment
    5 — plans to make an appointment to see a doctor
    6 — does not intend to see a doctor
    7 — could not reach screenee

    Add any additional information you think helpful.

Needless to say, always be courteous. Do not make calls if you feel angry, upset, or tired. Your feelings will show in your voice, and you won't be setting the tone for a brief but friendly telephone chat.

You're providing an extremely useful service. Enjoy doing it, and again, our sincerest thanks.

Referral Names and Phone Numbers

Source: American Heart Association, South Carolina Affiliate.

Exhibit 19

Sample Reminder Letter

Dear _____:

As you know, your blood pressure seemed to be high at our recent blood pressure screening. At that time, we asked you to contact your doctor for further evaluation, and I gave you a return card and a self-addressed, stamped envelope for your use in informing me of the date of your appointment with your doctor. To date, I have not received this card from you.

High blood pressure can be treated easily and effectively. We want blood pressure screening to be an effective means for preventing heart disease and stroke for as many people as possible.

I am writing to you today to find out if you have seen your doctor. Enclosed is another return card for your reply. If you have not yet seen your doctor, I hope this letter will remind you that it is important to your health to follow up on your test as advised.

I look forward to hearing from you.

Sincerely,

_____

Medical Director
Blood Pressure Screening Program

Enclosure

Source: Adapted from American Heart Association, New York City Affiliate.

Exhibit 20

Sample Followup Postcard for Doctor

This form is sent back to program with diagnosis and treatment information 3 months after initial visit.

☐☐☐☐☐☐☐☐☐

NAME: _____

DIAGNOSIS:

☐ Essential hypertension

☐ Secondary hypertension

(Please circle type:

renal, adrenal, primary aldosteronism,

other _____)

☐ Not hypertensive

IF HYPERTENSIVE, WHAT THERAPY?

☐ Medication (Please circle or list type:

1. diuretic 2. _____

3. _____ 4. _____

☐ Low sodium diet

☐ Weight reduction

☐ Stress reduction

☐ Other _____

(Please tear off and mail in attached envelope)

ON HBP THERAPY NOW? ☐ Yes ☐ No

IF NOT, WHO STOPPED THERAPY?

☐ Doctor ☐ Patient

MAY WE ASSIST PATIENT EDUCATION?

☐ Yes ☐ No

RECOMMENDED # OF VISITS/YEAR:

_____/year

LAST BP: _____/_____

DATE: _____/_____/_____

IS HBP CONTROLLED? ☐ Yes ☐ No

HBP COMPLICATIONS THIS YEAR:

☐ Heart attack ☐ Stroke

☐ Renal ☐ Other _____

INCIDENTAL ILLNESS DETECTED (type):

_____

_____

THANKS FOR YOUR HELP!

CLASS
Permit No.
Milwaukee, Wis.

BUSINESS REPLY MAIL

NO POSTAGE STAMP NECESSARY IF MAILED IN THE UNITED STATES

POSTAGE WILL BE PAID BY

Milwaukee Blood Pressure Program
7630 West Mill Road
Milwaukee, Wisconsin 53218

Source: Milwaukee High Blood Pressure Program.

be the program coordinator for the church or the coordinator in the cooperating health organization. File separately those forms completed for people with elevated readings to make followup contact easier. It may be useful to file them by the date on which a reminder will be sent — in the next few days for those referred to a doctor or clinic or in 6 months to a year for those referred to a second screening.

You will also need to keep track of followup contacts and their results. Some programs reserve space on the original screening form to record this information; others use separate forms. It is useful to have enough room on the form to keep track of attempts to reach people, if contact is by telephone or in person, as well as the actual contact. (See chapter III for sample forms.) Keep a separate file for those persons contacted who have not yet seen a doctor and therefore need to be contacted again.

Education

Lack of long-term adherence to therapy is the major problem in controlling high blood pressure, according to the *1984 Report of the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure* (JNC).[20] Studies have shown that patients frequently do not clearly remember instructions given in a doctor's office.[21] Patient education, on the other hand, has a significant effect on knowledge and adherence.[22]

Religious institutions are ideally situated to offer education and support programs. Most churches and synagogues already have groups that meet regularly during the week; thus, the logistical and communications systems to support such activities are in place. In some cases, HBP control activities can even be incorporated into existing groups. For example, a prayer breakfast could feature low-fat, low-sodium foods; a group for seniors could view a film on high blood pressure at one meeting and organize a walk for health at another; and an auxiliary could organize a support group.

During the planning phase, program coordinators will determine whether to arrange for in-house health education programs, refer patients to outside resources, or use a combination of approaches. If in-house programs are planned, consider the following topics and strategies.

Topics

High blood pressure education can include workshops, classes, or meetings organized around the following topics:

- *Weight Loss.* Losing weight is one of the best things that overweight people with high blood pressure can do for their health. A church-based weight loss program for high blood pressure control in Baltimore consists of eight 2-hour sessions that include diet counseling and exercise. Many participants in the program have reduced both weight and blood pressure.[23] Weight loss groups can be organized in-house, or people can be referred to community resources, such as local hospitals, clinics, YMCA's, and YWCA's. If an in-house program is preferred, ask these groups to help get one started.

- *Sodium Restriction.* Too much sodium, a component of salt, can make high blood pressure worse, and cutting down to about 2 grams of sodium (1 teaspoon of salt) a day can help lower blood pressure for some people. Low-sodium cooking classes may be organized as part of other activities, such as committee meetings or church suppers. Some programs have collected low-sodium recipes from the congregation and produced a cookbook. Activities could include instructions for using ingredient and nutrition labels on processed foods and on choosing low-sodium foods at the supermarket. A local American Heart Association may be able to assist with educational materials for low-sodium cooking.

- *Smoking Cessation.* Smokers, even if they have normal blood pressure, are two or three times more likely to have heart attacks than are people who do not smoke. Nobody with high blood pressure should be adding to their cardiovascular risk by smoking. Local units of the American Lung Association, the American Heart Association, and the American Cancer Society can help establish quit-smoking programs. Other resources include local health departments, hospitals, and clinics. The Seventh-Day Adventist Church also sponsors a well-established smoking cessation program.

- *Exercise.* Walking, jogging, swimming, and other kinds of regular exercise contribute to health in many ways and may help lower blood pressure.

Recent studies show that increased exercise may be associated with a reduced risk of high blood pressure.[24] As with low-sodium cooking, churches and synagogues can incorporate exercise programs into existing activities. Speakers, materials, and other resources for exercise programs are often available from the American Heart Association, YMCA's and YWCA's, and local health departments. Anyone entering an exercise program should check with their doctor first.

- *Alcohol.* Heavy drinking has been shown to increase blood pressure. The JNC recommends that high blood pressure patients consume no more than 2 ounces of ethanol per day. (One ounce of ethanol is contained in 2 ounces of 100-proof whiskey, 8 ounces of wine, or 24 ounces of beer.) This can be emphasized during educational sessions on diet and translated into practical examples.

- *Medicine.* Reducing blood pressure with drugs decreases cardiovascular mortality and morbidity in patients with high blood pressure.[20] Churches can conduct educational sessions on prescribed medicines and their proper use. These sessions can present suggestions for establishing communication with the doctor about prescribed medicines; tips for remembering to follow drug regimens; and guidelines for handling problems associated with taking medicines (e.g., missed dosages, side effects, and drug interactions). The National Council on Patient Information and Education can provide activity ideas and lists of available resources on the topic of prescription drugs. (See appendix A.)

General Information on High Blood Pressure

The cardiovascular risks associated with uncontrolled high blood pressure, the benefits of controlling it, the importance of taking prescribed medicine as directed, and the need to have blood pressure monitored regularly — these are all important topics. They should be integrated into counseling and education at all stages of a high blood pressure control program — in the training of volunteers, during screenings and monitorings, during followup contacts, and in educational programs.

Strategies

Studies of patient education, as well as the experience of various programs, have demonstrated that certain strategies have a good chance of success. Here are some suggestions.

- Use audiovisuals in addition to speakers and printed materials.
- Teach skills, such as home blood pressure measurement or cooking without salt.
- Emphasize the positive benefits of controlling high blood pressure rather than the negative consequences of ignoring it.
- Do not overload the patient with too many messages at once.
- Give consistent information; be sure that everyone involved in counseling or education programs is consistent in explaining high blood pressure and its treatment.
- Encourage patient participation in learning.
- Recognize that lasting behavior change must be the decision of the patient and cannot be mandated successfully by anyone else.
- Set small, attainable, and measurable goals (e.g., losing 5 pounds the first month). For example, have patients sign a contract to make these changes slowly over time.
- Involve families in the educational process to encourage support for behavior change.

A more detailed discussion of educational strategies is found in *Community Guide to High Blood Pressure Control* available from the National High Blood Pressure Education Program. (See appendix A.)

Support Groups

Peer discussion, self-help, and support groups give people a chance to discuss the difficulties in controlling high blood pressure and to share ways they have found to cope. Again, churches and synagogues are especially well situated with respect to such groups, since many people are accustomed to turning to religious institutions for support and counseling. In addition, because many of the people involved will already

have something in common — their membership in a congregation — they may form a strong support group quickly and easily.

Experts point out that support groups are not new. Churches and synagogues in themselves are large support groups that have existed for centuries, and ethnic minority groups have traditionally banded together in various kinds of self-help or support groups.[25]

The support groups that have sprung up in the last two decades share certain characteristics with these older mutual aid groups. Here is a definition adapted from L.H. Levy, a widely quoted authority on support groups.[25, 26]

- The purpose of the group is to provide help and support for the members so that they can deal with problems.
- The group exists because its members want it to exist, not because an outside authority has established it.
- The help comes primarily or entirely from the group members themselves.
- The group is generally made up of people with similar experiences and problems.
- The group decides its own agenda, although it may draw upon outside advice at times.
- The group elects its own leader to keep the group on schedule and to prevent any one member from dominating the group.

Organizing a support group for high blood pressure control in a church might involve steps such as those listed below.[25]

- Recruit a small group of interested persons.
- Hold an organizational meeting.
- Set a place and time for the first general meeting.
- Advertise the meeting.
- Determine the purpose, organizational structure, and format of meetings.
- Set up a regular meeting schedule.

Support group meetings often involve discussion, but it is usually helpful to provide a framework in the beginning. For example, each member could report on his or her progress in not smoking or cutting out salt. The next topic on the agenda might be HBP medicine. Is anyone experiencing side effects? Has anyone found a good way to remember when to take medicine? Outside speakers and educational films can also play a role in support group meetings.

More information on organizing a group is available from the National Self-Help Clearinghouse. (See appendix A.)

Forms and Files

Program coordinators may wish to keep track of the educational and support groups to which patients are referred, whether within or outside the program. As with referrals to doctors or clinics, periodic contact can remind and encourage patients to attend sessions. Files on community organizations, speakers, and sources of educational materials are also useful.

CHAPTER V
Evaluation

The word "evaluation" may sound technical, and perhaps bureaucratic, but most of it is common sense. You do not have to be a statistician to conduct an evaluation. In fact, formal or informal, evaluation is a natural part of any program. During the screening event, for example, the volunteers might comment: "It looks as though there are a lot of people here; having a special sermon must have worked." A few weeks later, the program coordinator might say: "A lot of people aren't making their clinic appointments; maybe we should try a different followup system." These intuitive assessments may be valid, but they are based on guesswork. This element in decisionmaking — guesswork — can be reduced to a minimum through the objective and systematic process known as evaluation.

Many guides to evaluation are available. For community groups, the National High Blood Pressure Education Program (NHBPEP) has published *Measuring Progress in High Blood Pressure Control: An Evaluation Handbook.* (See appendix A.)

This chapter outlines the essential steps in the evaluation process, as presented in the NHBPEP handbook, and gives specific examples of how these might be implemented in a HBP control program based in a church or synagogue.

Why Evaluate?

The evaluation process provides a framework for decisionmaking from the very beginning of a project. It aids in initial planning, ongoing assessment of daily operations, and formation of new directions. What should the program expect to achieve? How will it know what it has achieved? Should certain procedures be changed? Should resources (such as volunteer time) be shifted from one area to another? Should the program be repeated? Expanded? Changed? The purpose of evaluation is to answer questions like these.

Other benefits can be derived from evaluation. For example, evaluation permits volunteers and the rest of the congregation to see the results of their efforts. Evaluation lends credibility and accountability to a program. Documented results can form the basis of a report to a larger body such as a diocesan council or a community newspaper, thus gaining and maintaining support for the church. Objective data on results can make it possible for the program to share its experience, perhaps contributing to a larger network or helping another church to start a similar program.

Evaluation should not be considered a test of program success or failure. It is a framework with which to identify strengths and weaknesses and make adjustments accordingly. The more integral evaluation is to the program, the more likely it is that weak points will be identified early and corrected. Evaluation need not be expensive or time-consuming. Again, if integrated into the total program, evaluation will enhance efficiency and save time and money in the long run.

The Basics

Evaluation is formally defined as a system of data collection and analysis that can be used to measure program efficiency and effectiveness. Its principal components include the following.

- Planning the evaluation
- Collecting data as the program proceeds
- Analyzing data to see if the program has met its objectives
- Using the analysis to make decisions about the program.

Experts distinguish between three kinds of evaluation: process, outcome, and impact.

Process evaluation examines daily operations and activities. It helps answer questions such as the percentage of the congregation screened, the adequacy of the facility, and the reliability of the measurement equipment. This kind of ongoing assessment helps program coordinators make decisions about procedures. Are they working as planned or are adjustments needed?

Outcome evaluation examines program effects. It can show whether or not a program is accomplishing what it intended. Did the volunteers learn all they needed to in the training sessions? Have those with elevated readings all seen a doctor? Outcome evaluation is used to determine how well program objectives are achieved and whether or not the program should be modified accordingly.

Impact evaluation is a form of long-term, broad, outcome evaluation that measures the program's effects on the community at large. It may examine trends in cardiovascular mortality in a region or awareness of high blood pressure risks among a certain population. This is an expensive and complex form of evaluation and is not usually undertaken by community programs.

Planning an Evaluation

Planning an evaluation consists of four steps:

- Describing the program
- Identifying objectives
- Determining information needs
- Deciding on methods.

Describing the Program

A written description of the program is the first step. It should include an overall goal statement, specific objectives and descriptions of target groups, program activities, staffing, funding, facilities, and equipment, and even unintended effects — those not related to objectives.

For example, church X with 200 members will conduct a high blood pressure control program in cooperation with the local affiliate of the American Heart Association (AHA). The program's overall goal is to improve the health of its own members by lowering the risk of developing acute diseases related to uncontrolled high blood pressure. Specific objectives for this hypothetical program are described below. The program will recruit volunteers to be trained by the AHA; promote the screening event through the church newsletter and a special sermon; conduct three screenings held 6 months apart, after Sunday services in the church's largest meeting room; refer those with elevated pressures to a physician or clinic; mail postcard reminders to all those who were referred; telephone those referred 2 weeks later to verify that an appointment was made and kept; organize a support group in-house; and refer people to other educational programs in the community. Funds for the sphygmomanometers and stethoscopes will come from the church budget. An unintended — but desirable — effect of the program might be to draw family members or friends who do not usually attend into church activities.

Identifying Objectives

Objectives set specific goals for both procedures and results. To be most useful, objectives should be realistic, measurable, and concise, and they should answer these questions: what, who, how much, and when. What change or benefit is expected? Who is expected to change or benefit? How much of a change or benefit is anticipated? When is it expected to take place?

For example, church X has set the following objectives:

- To recruit nine volunteers and two backup volunteers 6 weeks prior to the first screening date.
- To hold four training sessions for the volunteers before the first screening date.
- To arrange for equipment and supplies — sphygmomanometers, stethoscopes, tables, chairs, forms, pens, and educational materials — 2 weeks prior to the screening.
- To publish an article about the screening in the church newsletter 2 weeks prior to the screening.
- To arrange for a special sermon on high blood pressure and the program 1 week prior to the screening.
- To recruit a support group leader 2 weeks prior to the screening.
- To collect brochures on community resources for patient education, and make them available as handouts on the church lobby display rack during the week following the screening.
- To ensure that all volunteers know the risks of high blood pressure, proper counseling techniques, and use of the measurement equipment.
- To screen 75 percent of the congregation at the first screening.
- To have 80 percent of those with elevated readings make and keep an appointment with a physician or clinic.
- To mail postcard reminders to all who have elevated readings within 72 hours of the screening.
- To follow up the postcard with a telephone call 2 weeks after the screening.
- To reduce the number of people in the congregation with uncontrolled high blood pressure by 50 percent after the first 6 months, 70 percent at the end of the first year, and 90 percent by the end of the second year.

- To maintain the 90-percent reduction in uncontrolled high blood pressure through ongoing monitoring, support, and education.

Determining Information Needs

The next step is to decide what information has to be collected in order to measure achievement of the objectives. Some experts distinguish *personal variables* — data on individuals screened — from *programmatic variables* — data on program activities. For example, a personal variable is a person's blood pressure reading, while the number of people screened is a programmatic variable.

For example, on the basis of the objectives given earlier, church X needs to collect the following information:

- Dates on which various activities are completed
- How much the volunteers learned during training
- Number of people screened
- Number of people screened who had elevated readings
- Number of people screened with elevated readings who see a doctor
- Number of people at each screening who have controlled high blood pressure
- Number of people who attend the support group
- Number of people who attend educational groups in the community.

Deciding on Methods

The level of effort devoted to evaluation and the methods used depend on the resources and needs of the program. The simplest kind of evaluation — monitoring schedules, counting persons screened — requires little extra time or money. More elaborate evaluation techniques (e.g., reviews of volunteers' adherence to guidelines, monitoring prescription refills) involve more resources.

Some of the more sophisticated evaluation tools are questionnaires (including pretests and posttests), time-series studies, case studies, sampling, and cost-effectiveness analyses. Various guides to evaluation can explain these and other techniques in detail. (See *Measuring Progress in High Blood Pressure Control: An Evaluation Handbook* in appendix A.) Keep in mind that a health organization also may be able to lend technical assistance for more detailed evaluations.

For example, church X realizes that its volunteers are already very busy and that its primary need is to evaluate basic procedures and simple outcomes. It opts for the simplest level of evaluation. Church X will check timetables to see if an appropriate amount of time was allowed for each step; make adjustments if necessary; and count numbers of people screened. The local affiliate of the American Heart Association, which is training the volunteers, already has developed pretests and posttests for the training sessions. These will be used to collect information on how much the volunteers learn during training.

Data Collection

The basic rule for collecting information in a program is to do it systematically. This ensures that the same kinds of data are collected in the same way, regardless of who is doing it at any particular moment. Using forms can help make the process systematic.

The design of forms and other recordkeeping systems is an important part of data collection. Based on information needs and uses, decide on the questions to be asked or data collected. Also determine the best way to group data. Is it more useful to group blood pressure readings in broad or narrow categories? Should age information be recorded by decade or by 5-year periods?

High blood pressure control programs, at the least, need a way to record information on blood pressure readings, referrals, and tracking steps (see chapter III). Most also devise a report or summary form to show totals in various categories. If churches are working with a large state or community high blood pressure control program, these forms may well be provided by the program with instructions for using them. Various kinds and combinations of forms have been designed. Some examples are shown in exhibits 21 and 22.

For example, based on its list of information needs, church X designs the following forms.

- A timetable that includes columns for planned completion date, actual completion date, and room for notes explaining any discrepancies.

Exhibit 21

Sample Tally Sheet for Blood Pressure Screening

Location of screening _____ Date _____

NO.	SEX		RACE		AGE	BP ELEVATED?		HX OR HBP?		ON BP MEDS?	
	M	F	WHITE	OTHER		YES	NO	YES	NO	YES	NO
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											

Source: Adapted from *The Church, High Blood Pressure, and the Community: Guidelines for a Church-Based Control Program*, American Heart Association, Georgia Affiliate.

Exhibit 22

Sample Report Form for Blood Pressure Screening

The screening coordinator is responsible for accurately completing this form. (1) Data for this report should be compiled from the tally sheets; (2) place digit numbers rather than stick figures for each category; and (3) check accuracy of the figures for each category.

_____
Signature of Screening Coordinator

_____ _____
Church or Group Month/Day/Year

_____ _____
City County

_____ _____ _____
Total Number Screened Total Number Elevated Total Number Males Screened Who Were Under Age 50

Description (race/sex) of all persons screened.

A. Male Total Number _____
White _____
Black _____
Other _____

B. Female Total Number _____
White _____
Black _____
Other _____

C. 49 and Younger	Male	HBP History	Female	HBP History
White				
Black				
Other				
TOTAL				
D. 50 and Older				
White				
Black				
Other				
TOTAL				

Source: *The Church, High Blood Pressure, and the Community: Guidelines for a Church-Based Control Program*, American Heart Association, Georgia Affiliate.

- A screening form for persons screened to keep, including blood pressure reading, date, status of control, and referral information. The standard blood pressure levels established by the JNC will be used as referral criteria (see chapter III, exhibit 13).

- A screening form for the program, including blood pressure reading, date, status of control, referral information, followup contacts, diagnosis, and basic demographic data. Because church X has a large proportion of older people, it decides to group ages by 5-year increments for those over age 60, but by decade for those under 60 (e.g., 40-49, 50-59, 60-64, 65-69, etc.).

- A summary report form showing total number of people screened, grouped by age, sex, and race; total number with elevated readings; and total number with controlled high blood pressure.

- An attendance form for the support group leader.

- A questionnaire on attendance at community education programs.

Data Analysis

The collected data must be analyzed to be of any use. For example, suppose that 37 people with elevated readings were referred to a doctor or clinic and that 30 of them made and kept an appointment. Analyze the numbers (in this case divide the first number into the second and multiply by 100) to obtain the percentage of people referred who made and kept a followup appointment. This figure is useful because it can measure the achievement of an objective.

Treat data analysis as a routine priority, one that is done periodically. This will make it easier to identify and devise ways to overcome problems early before they cause larger problems.

For example, the program coordinator in church X meets with the committee chairs weekly to review the timetable. They look at the dates of intended completion of certain tasks as well as the dates of actual completion. If the two dates do not match, they discuss the reasons, make notes in the appropriate space on the timetable form, and decide how best to cope with the problem, perhaps by adjusting other dates. When devising timetables for the next screening, they allow more (or less) time for certain steps.

After screening, church X looks at the number of people screened (150), compares that to the number in the congregation (200), and comes up with a percentage (75 percent). This analysis shows that the program more than achieved its objective of screening 60 percent of the population. The coordinator then decides that the same publicity techniques should be used for the next screening.

Using Evaluation Results

Evaluation is not worth doing unless the results are used. Evaluation results can be used to improve a program, to communicate with others about the program, and to plan new initiatives. Here are some of the specific ways that programs use evaluation results.

- Identify effective activities.
- Pinpoint areas where additional effort is needed.
- Compare different approaches.
- Gain and maintain support for the program.
- Share experiences with others.
- Plan an expansion in the program.

For example, in addition to the two examples given above, church X uses its evaluation results in the following ways.

Three weeks after the screening, when all followup telephone calls have been made, the coordinator reviews the followup forms and finds that 50 percent of those with elevated readings have not yet made appointments with a doctor or clinic. The coordinator decides that another set of calls should be made in 2 weeks. He or she also considers dropping the postcard system the next time and using telephone calls from the beginning.

After 3 months, the support group leader reviews attendance forms, and they confirm his or her impression that there has been a general upward trend in attendance, despite drops during two holiday weeks. In the meantime, the questionnaire circulated to the congregation on two different Sundays has indicated that few of those with elevated readings have attended patient education sessions in the community. The difference in popularity between the two activities show that in-house programs may be a better way of reaching church members. The coordinator and support group leader talk about integrating more diet and exercise information into support group meetings.

Six months later, after the second screening, the program coordinator examines the number of controlled hypertensives and finds that a larger percentage of the congregation has blood pressure under control than at the first screening. He or she can tell both volunteers and congregation that the program is beginning to achieve its main goal — improved health for members of the church.

Conclusion

High blood pressure is one of America's number-one killers, but it can be controlled. Churches, synagogues, and other religious institutions are in an ideal position to fight the battle against high blood pressure. With their longstanding traditions of support and concern for the whole person, their resources, and their influence in the community, these institutions have an excellent chance of establishing a successful blood pressure control program. And more and more churches are doing so.

This guide can only be a starting point. Each church is a unique mix of people; and as a church program grows, it develops its own character. Use the guide as a source of information and ideas as the church creates its program and as that program progresses toward its goal of better health for the congregation and the community.

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APPENDIX A
Additional Resources

For Patients and Consumers

High Blood Pressure

- **About High Blood Pressure** (pamphlet, 16 pages, revised 1986)

Describes blood pressure and high blood pressure, systolic and diastolic measurements, and primary and secondary hypertension. Discusses asymptomatic nature of high blood pressure and possible complications if let untreated. Distinguishes between controllable and uncontrollable risk factors. Stresses importance of diet, exercise and recreation, and medicine in treatment of high blood pressure. Also emphasizes keeping doctor's appointments, following instructions, and reporting problems.

Availability: Local and state affiliates, American Heart Association. Order No. 50-052-D. Cost information available from local and state affiliates.

- **Blacks Can't Afford to Gamble With High Blood Pressure: The Stakes Are Too High!** (leaflet, 6 pages, 1985)

Defines high blood pressure, and provides statistics about blacks and high blood pressure. Discusses risk factors that can increase chances of developing high blood pressure (i.e., family history, overweight, salt, fat, lack of exercise, smoking, alcohol, stress, and oral contraceptives), complications, and ways to control high blood pressure.

Availability: Southeastern Pennsylvania High Blood Pressure Control Program, Inc., 500 South Broad Street, Philadelphia, Pennsylvania 19146-1696. Telephone: (215) 546-1276. Cost: Free, single copies; bulk rates available

- **Blood Pressure Control** (leaflet, 6 pages, 1985)

States that the best way to control high blood pressure is to have it checked regularly, follow doctor's advice, and ask for support of friends and family. Discusses the importance of diet (restricting sodium, avoiding saturated fats and cholesterol, and controlling weight), exercise, and medicine to high blood pressure control. Encourages patients to link medication schedule with a daily routine and to remember to refill prescriptions. Provides checklist for blood pressure awareness and control, and includes record for noting types of medicine prescribed, dosage, and side effects.

Availability: Krames Communications, 312 90th Street, Daly City, California 94015-1898. Telephone: (415) 994-8800 outside California; (800) 445-7267 in California. Order No. 1145. Cost: $0.50 each, 1-24 copies; $0.35 each, 25-199 copies; $0.30 each, 200-499 copies; $0.25 each, 500 or more copies

- **Buying and Caring for Home Blood Pressure Equipment** (pamphlet, 23 pages, 1985)

Explains differences among mercury, aneroid, and electronic sphygmomanometers; the advantages and disadvantages of each type; how these devices operate; and proper maintenance of the equipment. Discusses important generic features to look for in blood pressure measurement equipment. Outlines benefits of home measurement to patients and their health care providers. Cautions that home measurement is not a substitute for periodic visits to the doctor.

Availability: Local and state affiliates, American Heart Association. Order No. 50-073-A. Cost information available from local and state affiliates

- **Controlling High Blood Pressure** (leaflet, 4 pages, 1982)

Examine myths and facts about high blood pressure, and defines blood pressure and hypertension. Describes factors that may contribute to high blood pressure (i.e., heredity, eating too much salty food, obesity, smoking, and stress. Presents tips in controlling high blood pressure: decrease sodium intake; maintain ideal weight; decrease intake of caffeine; decrease smoking; decrease stress; exercise; and take medications. Also available in Chinese, Japanese, Korean, Tagalog, and Vietnamese.

Availability: Asian Health Services, Health Education Branch, 310 Eighth Street, Oakland, California 94607. Telephone: (415) 465-3217. Call for cost information

- **High Blood Pressure & What You Can Do About It** (booklet, 32 pages, revised 1985)

Discusses high blood pressure, systolic and diastolic readings, blood pressure variability, distinction from nervous tension, asymptomatic nature, its causes, contributing factors, general prevalence, measurement, and complications that may occur if left untreated. Examines modern drugs, what they do, how they work,

and possible side effects. Reviews other risk factors for heart disease. Suggests lifestyle changes that may be recommended with respect to diet, smoking, exercise, tension reduction, tranquilizers, and drinking. Stresses that there is no cure and that patients have to share responsibility for controlling their blood pressure with their doctor. Includes summary of important facts about high blood pressure and glossary of terms. Uses patient case profiles to reinforce messages.

Availability: High Blood Pressure Information Center, 120/80 National Institutes of Health, Bethesda, Maryland 20892. Cost: Free

- **Test Your Healthy Heart I.Q.** (quiz, 2 pages, 1985)

Tests knowledge of heart disease and how to reduce the risk of developing it.

Availability: High Blood Pressure Information Center, 120/80 National Institutes of Health, Bethesda, Maryland 20892. NIH Publication No. 85-2724. Cost: Free.

Nutrition

- **Favorite Family Recipes for Sodium-Restricted Diets** (booklet, 73 pages, 1977)

Contains recipes that have been altered to reduce sodium yet suit cultural preferences of Hispanics and blacks. Provides guidelines for planning low-sodium diets, sample menu plans, and list of suggested seasonings to use in preparing meals. Discusses relationship between high blood pressure and diet, and addresses cholesterol intake and obesity.

Availability: Northeast Valley Health Corporation, High Blood Pressure Education and Control Program, 12756 Van Nuys Boulevard, Pacoima, California 91331. Cost: $3.50

- **A Guide to Losing Weight** (pamphlet, 16 pages, 1986)

Advises how to plan a diet to lose weight. Includes tips on how to calculate caloric level, suggestions on how to select nutritious food, and sample serving sizes of the various food groups.

Availability: Local and state affiliates, American Heart Association. Order No. 50-034-C. Cost information available from local and state affiliates.

- **The Healthy Approach to Slimming** (leaflet, 20 pages, 1984)

Stresses the importance of exercise in burning up calories that would otherwise be stored as fat. Discusses obesity and a sensible approach to weight loss.

Availability: American Medical Association, 535 North Dearborn Street, Chicago, Illinois 60610. Cost: $1, minimum order of 10 copies required

- **Low-Sodium Seasonings** (poster, 11" x 17", 1984)

Lists various spices and flavorings that can be used in place of salt when cooking.

Availability: Local chapters, American Red Cross. Stock No. 322078. Cost information available from local chapters

- **Low-Sodium Spice Tips** (leaflet, 6 pages, no date)

Contains a selection of low-sodium, low-calorie, and low-cholesterol recipes. Discusses combinations of spices to use with a variety of foods. Contains a chart listing the nutritional composition of ground spices.

Availability: American Spice Trade Association, 580 Sylvan Avenue, Edgewood Cliffs, New Jersey 07632. Cost: $0.25

- **Nutrition and Your Health: Dietary Guidelines for Americans**, second edition (pamphlet, 24 pages, revised 1985)

Discusses seven basic nutrition guidelines for Americans: (1) eat a variety of foods; (2) maintain desirable weight; (3) avoid too much fat, saturated fat, and cholesterol; (4) eat foods with adequate starch and fiber; (5) avoid too much sugar; (6) avoid too much sodium; and (7) if you drink alcoholic beverages, do so in moderation.

Availability: Dietary Guidelines, Consumer Information Center, Pueblo, Colorado 81009. Cost: Free

- **Questions About Weight, Salt, and High Blood Pressure** (leaflet, 10 pages, 1986)

Describes what is known about the relationship between certain diet changes and high blood pressure.

Availability: High Blood Pressure Information Center, 120/80 National Institutes of Health, Bethesda, Maryland 20892. NIH Publication No. 86-1459. Cost: Free

- **Sodium and Your Health** (leaflet, 6 pages, 1982)

Provides information about sodium, high blood pressure, and planning nutritious diets. Lists sodium content of some common foods in each of the basic food groups. Includes brief listing of additional materials.

Availability: American Medical Association, Department of Food and Nutrition, 535 North Dearborn Street, Chicago, Illinois 60610. Order No. OP-145. Cost: $0.75, single copies

- **The Sodium Content of Your Food** (booklet, 43 pages, 1980)

Contains table of sodium and salt conversions and general discussion of sodium and its sources in food and drugs. Arranges extensive food lists by food groups, and shows sodium content values in milligrams for common household measures, including metric equivalents. Includes sodium content of selected nonprescription drugs.

Availability: R. Woods, Consumer Information Center-Y, P.O. Box 100, Pueblo, Colorado 81002. Home and Garden Bulletin No. 233. Stock No. 001-000-04179-7. Cost: $2.25, single copies.

Exercise

- **"E" Is for Exercise** (pamphlet, 8 pages, 1981)

Explains the benefits of regular exercise, defines kinds of exercise, and specifies those that contribute to cardiovascular health. Provides tips on selecting and maintaining an exercise program. Discusses warmup, conditioning, and cool-down periods. Also available in Spanish.

Availability: Local and state affiliates, American Heart Association. Order No. 51-027-A. Cost information available from local and state affiliates

- **Exercise and Your Heart** (booklet, 43 pages, 1981)

Presents information on the effects of physical activity on the heart and practical guidelines for starting and staying on an exercise program.

Availability: National Heart, Lung, and Blood Institute, Communications and Public Information Branch, Building 31, Room 4A21, National Institutes of Health, Bethesda, Maryland 20892. NIH Publication No. 81-1667. Cost: Free

- **Walking for a Healthy Heart** (leaflet, 12 pages, 1984)

Describes the health benefits of walking, gives advice on starting a regular walking program, and advises how to determine one's target heart rate zone.

Availability: Local and state affiliates, American Heart Association. Order No. 51-047-A. Cost information available from local and state affiliates.

Medicines

- **About Your High Blood Pressure Medicines** (book, 149 pages, 1986)

Provides information in lay language about medicines used in the treatment of high blood pressure. Discusses high blood pressure and its treatment, and gives general information about the use of medicines.

Availability: United States Pharmacopeial Convention, Inc., 12601 Twinbrook Parkway, Rockville, Maryland 20852. Cost: $6.95

- **Get the Answers** (brochure, 4 pages, no date)

Encourages consumers to ask health professionals five basic questions about prescription medicines prescribed and dispensed to them: (1) What is the name of the drug, and what is it supposed to do? (2) How and when do I take it — and for how long? (3) What foods, drinks, other medicines, or activities should I avoid while taking this drug? (4) Are there any side effects, and what do I do if they occur? and (5) Is there any written information available about the drug?

Availability: National Council on Patient Information and Education, "Get the Answers" Campaign, 666 11th Street, N.W., Suite 810, Washington, D.C. 20001. Telephone: (202) 347-6711. Cost: $.12

- **How You Can Help Your Doctor Treat Your High Blood Pressure** (pamphlet, 17 pages, revised 1986)

Discusses the definition, causes, and treatment of high blood pressure. Emphasizes drug therapy, and provides a table of generic and trade names of antihypertensive medicines. Addresses some of the side effects of drugs that lower blood pressure, and gives advice on adjusting to antihypertensive therapy.

Availability: Local and state affiliates, American Heart Association. Order No. 50-012-F. Cost information available from local and state affiliates.

Alcohol

- **Alcohol, Nutrition, and You** (fact sheet, 1 page, 1983)

Discusses the effects of moderate alcohol consumption on nutrition, including its contribution of excess calories, displacement of important nutrients, and transient effects on the liver.

Availability: National Clearinghouse for Alcohol Information, P.O. Box 2345, Rockville, Maryland 20852. Order No. MS292. Cost: Free.

- **Alcohol Topics in Brief: Alcohol and Nutrition** (fact sheet, 10 pages, 1982)

Reviews the history of alcoholic beverages as a food source, and discusses their nutrient content, effects, and food value. Discusses nutritional diseases that can result from alcohol consumption. Includes a chart detailing the nutrient content of various alcoholic beverages.

Availability: National Clearinghouse for Alcohol Information, P.O. Box 2345, Rockville, Maryland 20852. Order No. RP0408. Cost: Free.

For Health Professionals

- **Better Eating for Better Health** (six-session course developed in conjunction with U.S. Department of Agriculture, 1984)

Covers planning nutritious meals; reducing fat, sodium, and sugar in the diet; reading food labels; and the relationship between diet and cardiovascular disease, high blood pressure, and cancer. Participants become involved by analyzing their own dietary habits and identifying strategies to improve personal eating patterns.

Availability: Local chapters, American Red Cross. Cost information available from local chapters

- **Culinary Hearts Kitchen Cooking Course** (instructor's manual, slides, posters, recipes, handouts, and bibliography, revised 1986)

Includes recipes, slides, and teaching text on low-sodium lifestyles. Features step-by-step methods of cooking American favorites as well as international and ethnic foods.

Availability: Local chapters, American Heart Association. Cost information available from local chapters. Order No. 64-751-A. Cost: Free.

- **Heart to Heart** (manual, 121 pages, 1983)

Discusses nutrition counseling for cardiovascular health. Shows health professionals how to help patients change their eating habits. Includes professional references, sources for patient education materials, checklist for evaluating patient education materials, and listing of professional associations and voluntary health groups.

Availability: National Heart, Lung, and Blood Institute, National Institutes of Health, Building 31, Room 4A21, Bethesda, Maryland 20892. Telephone: (301) 496-4236. NIH Publication No. 83-1528. Cost: Free, single copies

- **How to Measure Blood Pressure** (3-hour teaching module replacing Vital Signs, Module II: Blood Pressure, no date)

Teaches lay people standard techniques for measuring blood pressure, and serves as an update for health professionals. Discusses referral and followup criteria for individuals with elevated readings.

Availability: Local chapters, American Red Cross. Cost information available from local chapters

- **How to Organize Self-Help Groups** (booklet, 47 pages, 1979)

Begins with discussion of what self-help is and who needs it, followed by practical guidelines for starting a self-help group. Examines some conditions necessary for a group to be effective. Explains how to prepare a statement of purpose, solicit membership, locate appropriate meeting space, set up the first meeting, and determine the role of the facilitator. Presents the 12-step program of Alcoholics Anonymous as an example.

Availability: National Self-Help Clearinghouse, 33 West 42nd Street, New York, New York 10036. Telephone: (212) 840-1259. Cost: $6

- **JNC Desk Card** (desk card, 1 page, 1985)

Presents blood pressure classification and followup criteria from the 1984 Report of the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure. Includes stepped-care ap-

proach to drug therapy, and lists antihypertensive agents identified in the report.

Availability: High Blood Pressure Information Center, 120/80 National Institutes of Health, Bethesda, Maryland 20892. Cost: Free

- **The Lowdown on High Blood Pressure** (multimedia 10-hour course, including brochures, instructor's guide, a 16 mm film, and four slide presentations, 1983. Film and slide material is also available on videocassette.)

Provides information about high blood pressure for hypertensive patients and their families. Helps patients apply what they learn to their own treatment plan and lifestyle.

Availability: Local chapters, American Red Cross. Cost information available from local chapters.

- **Measuring Progress in High Blood Pressure Control: An Evaluation Handbook** (report, 57 pages, 1986)

Offers assistance to community high blood pressure programs; provides guidelines for measuring, documenting, and sharing program achievements.

Availability: High Blood Pressure Information Center, 120/80 National Institutes of Health, Bethesda, Maryland 20892. NIH Publication No. 86-2647. Cost: Free

- **Nonpharmacologic Approaches to the Control of High Blood Pressure** (report, 28 pages, 1986)

Provides a comprehensive summary of current knowledge on a variety of nonpharmacologic means generally thought to be effective in reducing high blood pressure.

Availability: High Blood Pressure Information Center, 120/80 National Institutes of Health, Bethesda, Maryland 20892. Cost: Free

- **Patient Tracking for High Blood Pressure Control** (manual, 66 pages, 1981).

Outlines procedures for planning and operating a patient tracking system for improved control of high blood pressure in a variety of health care settings.

Availability: High Blood Pressure Information Center, 120/80 National Institutes of Health, Bethesda, Maryland 20892. NIH Publication No. 81-2204. Cost: Free

- **The Physician's Guide: How to Help Your Hypertensive Patients Stop Smoking** (guide, 24 pages, 1984)

Shows what every doctor can do within a busy office practice to persuade hypertensive patients to stop smoking.

Availability: High Blood Pressure Information Center, 120/80 National Institutes of Health, Bethesda, Maryland 20892. NIH Publication No. 84-1271. Cost: Free

- **The Physician's Guide: Improving Adherence Among Hypertensive Patients** (guide, 36 pages, 1987)

Presents ways doctors can improve patient education and increase adherence to treatment and control of high blood pressure, including strategies to encourage behavior changes often required of hypertensive patients (i.e., taking medicine daily, maintaining desirable weight, reducing dietary sodium, increasing vigorous exercise, and moderating alcohol consumption).

Availability: High Blood Pressure Information Center, 120/80 National Institutes of Health, Bethesda, Maryland 20892. Cost: Free

- **Printed Aids for High Blood Pressure Education: A Guide to Evaluated Publications** (guide, 123 pages, 1985)

Describes and evaluates high blood pressure education materials available from a variety of sources.

Availability: High Blood Pressure Information Center, 120/80 National Institutes of Health, Bethesda, Maryland 20892. NIH Publication No. 85-1244. Cost: Free

- **Statement on Hypertension in the Elderly** (report, 10 pages, 1986)

Reviews new findings from clinical trials. Presents new guidelines to provide health professionals with the state of the science in the management of high blood pressure in their elderly patients.

Availability: High Blood Pressure Information Center, 120/80 National Institutes of Health, Bethesda, Maryland 20892. Cost: Free.

APPENDIX B
Useful Contacts

Name and Address	Contact Person/Title	Phone Number
American Heart Association Georgia Affiliate P.O. Box 6997 Marietta, GA 30065	Tommie Bradford Coordinator, HBP Program and HEY Program	(404) 952-1316
American Heart Association Nation's Capital Affiliate 2233 Wisconsin Avenue, N.W. Washington, DC 20007	Amber Thorton-Washington, M.P.H. Sharon Crossley, M.P.H.	(202) 337-6400
Community High Blood Pressure Control Program Yosemite Community College District P.O. Box 4065 2937 Veneman, Suite 245 Modesto, CA 95352	Sally Stange	(209) 575-6433
Community Hypertension Program Mt. Sinai Medical Center One Mt. Sinai Drive Cleveland, OH 44106	Joyce Lee, R.N., C.N.P.	(216) 421-4280
Division of Health Care Outreach University of Kansas School of Medicine - Wichita 1010 N. Kansas Wichita, KS 67214-3199	RoxAnn Banks Dicker, R.N., M.N. Associate Dean for Community Affairs	(316) 261-2641
Georgia Department of Human Resources Division of Public Health Adult Health Unit 878 Peachtree Street, NE. Suite 218 Atlanta, GA 30309	Ronnie S. Jenkins, M.S. Health Program Consultant	(404) 894-4451
Health and Human Services Program of the General Baptist State Convention 603 South Wilmington Street Raleigh, NC 27601	Curtis Jackson, Project Director	(919) 821-7466
High Blood Pressure Program of San Diego and Imperial Counties San Diego Council of Community Clinics 4290 Polk Avenue San Diego, CA 92105	Robyn Prime	(619) 283-5904
Inland Counties Hypertension Control Coordinating Council 1960 Chicago Avenue Suite D-23 Riverside, CA 92507	Jose A. Marquez	(714) 825-7510

Name and Address	Contact Person/Title	Phone Number
Liberty Medical Center Church High Blood Pressure Program 2600 Liberty Heights Avenue Suite 138 Baltimore, MD 21215	Jewell Crowell, R.N., Project Director	(301) 578-2415
Memphis High Blood Pressure Control Coalition University of Tennessee 66 N. Pauline, #232 Memphis, TN 38105	Carol Feit-Hale, M.Ed., Coordinator	(901) 528-5915
Project Search Medical University of South Carolina Medical University Hospital 171 Ashley Avenue Charleston, SC 29425	Brenda Comfort, R.N. Patricia Griffin, R.N.	(803) 792-2501
Queen Anne's County Health Department Black Leaders for Blood Pressure Control 206 North Commerce Centerville, MD 21617	Kay Higgs, R.N.	(301) 758-0720
Rural Health Research Program University of Mississippi P.O. Box 283 Goodman, MS 39709	Dennis Frate, Ph.D., Program Director	(601) 472-2322
Sound Heart 1422 34th Avenue Seattle, WA 98122	Diane Rapin, M.P.H.	(206) 324-0404
St. Vincent Hospital and Health Care Center 2001 W. 86th Street P.O. Box 40970 Indianapolis, IN 46240-0970	Carolyn M. Amos, R.N.	(317) 871-2751
Tuskegee Veterans Administration Tuskegee Area Health Education Center, Building 9 Tuskegee, AL 36083	Sceiva Holland, M.Ed. Executive Director	(205) 727-0550
Urban Cardiology Research Center 2300 Garrison Boulevard Suite 150 Baltimore, MD 21216	Wayne Kong, Ph.D.	(301) 945-8600

APPENDIX C

Mt. Sinai Medical Center Community Hypertension Program Training Program for Blood Pressure Measurement (Adapted)

The Mt. Sinai training program for blood pressure measurement consists of five sessions for volunteers.

Session 1, the initial meeting of volunteers, presents an overview of high blood pressure and the HBP control program. It also includes a volunteer information form and a pretest questionnaire.

Session 2 consists of an overview and lecture outline for the blood pressure measurement program.

Session 3 also presents an overview and lecture outline and practice in measuring blood pressure. In addition, this section presents two useful handouts — one on how to measure blood pressure and the other on how to read a blood pressure measurement device.

Session 4 stresses practice in measuring blood pressure and explains the logistics of the actual screening session. An overview, a lecture outline, and three handouts are included. (The handouts address the role of the volunteer screener, the role of the volunteer coordinator, and referral guidelines).

Session 5 includes more practice in blood pressure measurement and is designed to teach volunteers how to set up a screening session. This session also includes an overview, a posttest to determine how much volunteers have learned, and an evaluation of the training program.

Session 1

Overview

Goals:

1. To present general facts about high blood pressure.
2. To present an overview of the Mt. Sinai Medical Center Community Hypertension Program.
3. To elicit volunteer commitment to an extended learning and training session.

Behavioral Objectives:

At the end of the initial session, volunteers should be able to:

1. State one purpose of the Mt. Sinai Medical Center Community Hypertension Program.
2. State their own role and responsibilities.
3. Define the role and responsibilities of the nurse consultant.
4. Define the role of the church members who participate in the screening program.
5. List the limitations of the program.
6. Identify the date, time, and location for the next meeting.

Materials Needed:

1. Attendance sheet.
2. Handout with the nurse consultant's name and telephone number.
3. Pamphlets.

Session 1

Training Methods

Topic	Content	Method
Overview	Background Information on High Blood Pressure High blood pressure is a disease in which the blood is flowing through the arteries at an increased pressure. The cause of high blood pressure in most people is unknown. High blood pressure is more common and often more severe in blacks than in the general population. Untreated high blood pressure can affect target organs — i.e., the brain, heart, and kidneys. Damage to target organs by uncontrolled high blood pressure will cause early disability and death by means of heart disease, stroke, or kidney disease. Blacks are more than twice as likely as whites to have a stroke. The percentage of blacks on artificial kidney machines is greater than that of whites. Almost half of the people who have high blood pressure do not know that they have it.	Lecture
Purpose	The purpose of the Mt. Sinai Medical Center Church Hypertension Program is to: Educate the church community about the morbidity and mortality of undetected and uncontrolled high blood pressure. Identify those persons who do not know that they have high blood pressure. Identify those persons who have discontinued treatment for high blood pressure. Refer all persons who have an elevated blood pressure to a private doctor or health care agency.	Lecture

Session 1

Volunteer Information Form

Your Name _____ Phone Number _____

Address _____ Name of Church _____

_____ _____

_____ Date _____

Please check only one answer

1. How much do you believe you know about high blood pressure?

   A. Nothing. I have never heard about it.

   B. Very little. I have heard about high blood pressure but do not really know what it is.

   C. Enough. I have heard about it and understand its importance.

   D. A lot. I have studied it in school or read a number of articles.

2. Do you know how to measure blood pressure?

   A. Yes B. No

3. How often do you routinely measure blood pressure?

   A. Never
   B. Rarely (less than three times per year)
   C. Sometimes (two to three times per month)
   D. All the time (daily or weekly)

4. Can you see well?

   A. Yes B. No

5. Can you hear well?

   A. Yes B. No

6. Do you have any medical background?

   A. M.D.
   B. R.N.
   C. L.P.N.
   D. Nurse Aide
   E. Other: Please specify _____
   F. No medical background

Session 1

Volunteer Questionnaire
(Pretest and Posttest)

Everyone participating in the Mt. Sinai Medical Center Community Hypertension Program must take a pretest and posttest. The short pretest determines how much you know about high blood pressure and determines your specific learning needs. In Session 5, the test is repeated to determine how much you learned from the training course.

Instructions: Please check only one answer to each question. Please check the answer that best completes the sentence. Please mark "I do not know" if you do not know the answer.

1. The systolic pressure:
   A. Is the first distinct tapping sound heard when deflating the cuff.
   B. Occurs at the beginning of the fifth phase of the Korotkoff sounds, characterized by the disappearance of sound.
   C. Occurs at the beginning of the fourth phase of the Korotkoff sounds, characterized by a muffling of sound.
   D. Is the most important blood pressure reading.
   E. I do not know.

2. The diastolic pressure:
   A. Is the first distinct tapping sound heard when deflating the cuff.
   B. Occurs at the beginning of the fifth phase of the Korotkoff sounds, characterized by the disappearance of sound.
   C. Occurs at the beginning of the fourth phase of the Korotkoff sounds, characterized by a muffling of sound.
   D. I do not know.

3. High blood pressure:
   A. Depends upon your age — the older you are, the higher your blood pressure can be and still be normal.
   B. Is systolic pressure greater than 160 mm Hg or diastolic pressure greater than 100 mm Hg.
   C. Is systolic pressure greater than 140 mm Hg or diastolic pressure greater than 90 mm Hg.
   D. I do not know.

4. Hypertension is the same thing as:
   A. Anxiety.
   B. High blood pressure.
   C. Depression.
   D. I do not know.

5. All of the following contribute to high blood pressure except:
   A. Too much salt.
   B. A member of the black race.
   C. Overweight.
   D. High-protein diet.
   E. I do not know.

6. Often, people who have high blood pressure stop treatment because:
   A. There are so many symptoms that it is discouraging to treat them all.
   B. They often feel fine and do not realize they still have high blood pressure.
   C. Both of the above.
   D. Neither of the above.
   E. I do not know.

7. If a cuff that is too small is used:
   A. The reading will be falsely high.
   B. The reading will be falsely low.
   C. There will be no difference in the blood pressure reading.
   D. I do not know.

8. If a cuff that is too large is used:
   A. The reading will be falsely high.
   B. The reading will be falsely low.
   C. There will be no difference in the blood pressure reading.
   D. I do not know.

9. To determine if the proper size cuff is being used:
   A. Determine the age of the person having his or her blood pressure checked, and correlate it with standardized size for that age group.
   B. The cuff should encircle the arm without overlapping.
   C. The bladder should encircle the arm without overlapping.
   D. I do not know.

10. The pulse pressure is:
   A. The difference between the systolic and diastolic pressure.
   B. The pressure at which the radial pulse is not palpated.
   C. The difference between the apical and radial pulse.
   D. I do not know.

11. The systolic pressure is:
   A. The pressure of the blood as it is being forced through the arteries while the heart is in between beats.
   B. The pressure of the blood as it is being forced through the arteries while the heart is contracting.
   C. Is the most important reading.
   D. I do not know.

12. If blood pressure has to be rechecked for the second time:
   A. Quickly reinflate the mercury before it goes down to zero.
   B. Let all the air out of the cuff, and wait 1 or 2 minutes before reinflating.
   C. Use the other arm.
   D. I do not know.

13. The cuff should be inflated:
   A. At least up to 200 to make sure you get the systolic pressure.
   B. 30 mm above the palpatory reading.
   C. 20 mm above the last systolic blood pressure reading.
   D. I do not know.

Comments: _____

_____

_____

Answers to Volunteer Questionnaire
(Pretest and Posttest)

1. A
2. B
3. C
4. B
5. D
6. B
7. A
8. B
9. C
10. A
11. B
12. B
13. B

Session 2

Overview

Goals:

1. To define high blood pressure.
2. To disseminate information on the morbidity and mortality of untreated high blood pressure.
3. To discuss how high blood pressure is detected.
4. To discuss the treatment of high blood pressure.
5. To identify those volunteers who have the basic skills to learn how to measure blood pressure.
6. To elicit those volunteers with the necessary basic skills to attend the next meeting.

Behavioral Objectives:

At the end of the second session, volunteers should be able to:

1. Define blood pressure in lay terms.
2. Define high blood pressure (hypertension) in lay terms.
3. List the target organs affected by undetected and uncontrolled high blood pressure.
4. Identify the means to detect high blood pressure.
5. State the length of time an individual needs to be treated for high blood pressure.
6. Demonstrate that they have the basic skills needed to learn how to measure blood pressure.
7. Identify the place, time, location, and purpose of the next meeting.

Equipment Needed:

1. Audiovisual equipment.
2. Audiovisual materials.
3. Pamphlets on high blood pressure.
4. Pretest.

Session 2

Training Methods

Topic	Content	Method
What Blood Pressure Is	*Blood Pressure is Needed by the Human Body* The body is made up of millions of cells. These cells group together and form organs (brain, heart, lung, kidneys). All cells need food and nutrients to survive. The cells receive their food by way of a blood supply. *How Blood Gets to the Cells* Blood must have a way to reach the cells. The blood travels along highways called arteries. The blood must have a way to get through the arteries. A pump called the heart pushes the blood. *Blood Pressure* Blood pressure is the force of the blood going through the arteries. Blood pressure is essential to life because it is needed to force the blood carrying food and nutrients to all of the cells in the body.	Lecture
Define High Blood Pressure	*High Blood Pressure (HBP)* HBP exists when the force of the blood going through the arteries is too strong. This increased force strains the heart and makes it work harder. This increases the force on the blood vessels, which can make them weak, or even cause a break in the vessel. Hypertension is a medical term that means high blood pressure. High blood pressure is not the same as "low blood." "Low blood" may mean that there is not enough iron in the blood. HBP means that the force of the blood going through the arteries is too strong.	Lecture

Target Organs	*The Brain Is Affected by Uncontrolled HBP* The force of the blood going through the arteries in the brain becomes too great. The walls of the vessels change in a way that can cause damage to the brain tissue. Damage to the brain tissue is a stroke. *The Heart Is Affected by Uncontrolled HBP* Uncontrolled high blood pressure leads to heart disease. The heart is affected because it keeps trying to get the blood to the cells. The heart pumps harder and gets bigger. This increased work may cause the pumping action to fail eventually. *The Kidneys Are Affected by Uncontrolled HBP* The kidneys are organs that filter waste products out of the blood stream. In order to filter the blood, the kidneys have millions of tiny blood vessels. The kidneys cannot keep up with the increased strain in these blood vessels from the high pressure. The blood vessels collapse or shut down. This causes kidney malfunction or total failure. A person with kidney failure may require kidney dialysis or transplant surgery to live. *Damage to Any of These Vital Organs Can Cause Permanent Disability or Death*	Lecture
Treatment of High Blood Pressure	*High Blood Pressure Can Be Treated* *Methods:* Medication Weight control Sodium restriction Moderation of alcohol consumption	Lecture

	The treatment program is prescribed by a doctor and usually consists of all four methods. Treatment is usually for a lifetime, not for a day, a week, a month, or a year. There is no cure for HBP, but it can be controlled. Treatment should never be stopped without a doctor's advice.	
Screening for High Blood Pressure	*Detection of HBP* There are usually no symptoms of HBP. This is why HBP is called the "silent killer." One can feel good, and blood pressure can be getting higher. The only way to know for sure whether or not the blood pressure is high is to have it measured. Measuring blood pressure is painless and takes less than 2 minutes. Volunteer HBP screeners will measure blood pressure of church members. Volunteer HBP screeners will be able to tell church members if their blood pressure is elevated on that day. Volunteer HBP screeners will be able to refer church members with elevated blood pressure to a source of health care. By participating in the Mt. Sinai Medical Center Community Hypertension Program, volunteers will be detecting and monitoring HBP among church members. Volunteer HBP screeners will be helping church members to prevent early disability or death due to undetected or uncontrolled HBP.	Lecture
Basic Skills and Equipment Needed	The following are needed in order to measure blood pressure: • Sphygmomanometers (blood pressure measurement devices), stethoscopes, and blood pressure cuffs provided by the Mt. Sinai Hospital.	Demonstration Film Discussion

	• Good eyesight (with or without glasses) and good hearing. *Review* A film is shown, followed by a question-and-answer session.	Lecture
Preparation for the Next Meeting	*Information Regarding the Next Meeting* All equipment necessary for measuring blood pressure will be available. Volunteers will practice measuring blood pressure on each other. The session will be 1½ to 2 hours long. *Establish Date, Time, and Location for the Next Meeting* *Volunteers Sign the Attendance Sheet*	

Session 3

Overview

Goals:

1. To demonstrate how to measure blood pressure.
2. To demonstrate how to read a mercury sphygmomanometer.
3. To provide group and individual instruction on how to measure blood pressure.
4. To identify those volunteers who need additional training in measuring blood pressure.
5. To set up a practice session for measuring blood pressure.

Behavioral Objectives:

After this session, volunteers should be able to:

1. List the equipment needed to measure blood pressure.
2. Demonstrate assembly of blood pressure equipment.
3. Demonstrate skills of proper blood pressure measurement.
4. Identify any problems in learning the skills of blood pressure measurement.
5. Identify the time, place, and location for the next meeting.

Equipment Needed:

1. Audiovisual equipment and an extension cord.
2. Audiovisual training materials.
3. Mercury sphygmomanometers and teaching stethoscopes.
4. Blood pressure cuffs of different sizes.
5. Handouts on how to measure blood pressure.

Session 3

Training Methods

Topic	Content	Method
How to Measure Blood Pressure	*Learning to Measure Blood Pressure* Audiovisual presentation on how to measure blood pressure Assembly of measurement equipment Demonstrate assembly to volunteers. Have volunteers repeat the demonstration. Measuring Blood Pressure Demonstrate measurement to volunteers. Using teaching stethoscopes, work individually with each volunteer.	Lecture Demonstration
Preparation for Next Meeting	*Arrange Time for Additional Practice for Individuals, as Indicated, Prior to the Next Meeting* *Instruct Each Volunteer to Bring at Least Two Additional Persons to the Next Meeting to Use as Practice Patients* *Distribute Handouts for Home Review*	Practice Lecture

Session 4

Overview

Goals:

1. To review how to measure blood pressure and read a mercury sphygmomanometer.
2. To provide individualized instruction and practice for all volunteers.
3. To confirm that volunteers can measure blood pressure accurately.
4. To present data collection forms that will be used during the screening sessions.
5. To present and discuss guidelines for blood pressure referral.
6. To describe when and how to use the list of private doctors and referral agencies.
7. To identify a coordinator from the volunteer group and discuss the coordinator's role.
8. To identify HBP screeners and discuss their role.
9. To describe how to physically set up a screening session.
10. To arrange the time, date, and location for the practice screening session on a small church group before screening the entire congregation.

Behavioral Objectives:

After this session, volunteers should be able to:

1. Demonstrate how to measure blood pressure accurately.
2. Demonstrate how to read a mercury sphygmomanometer accurately.
3. Identify data collection forms and how they are to be used.
4. Identify how and when to use the referral system.
5. Identify the time, location, and group that will be used for the practice screening session.

Equipment Needed:

1. Blood pressure equipment and teaching stethoscopes.
2. Handouts:
   a. Data collection forms and guidelines for blood pressure referral.
   b. Referral list.
   c. Role of the volunteer HBP screener.
   d. Role of the volunteer church coordinator.

Session 4

Training Methods

Topic	Content	Method
How to Measure Blood Pressure and Read a Mercury Sphygmo-manometer	*Review of Session 3* Review the steps on how to measure blood pressure and read a mercury sphygmomanometer. Have the health professional work with all volunteers individually as they measure blood pressure of their practice patients. *Mechanics of the Screening Session* Data collection forms Data collection forms are an important part of the church screening program. Without this information, it would be impossible for the nurse practitioner to follow up on all persons with elevated blood pressure. It is very important that the volunteers have each church member participating in the program fill out all forms completely and accurately. Pass out screening forms and review.	Discussion Demonstration Lecture Questions and Answers
Physical Setup for Screening Session	For the screening sessions to run smoothly and efficiently, volunteers will need the following: Sign-in table where all forms, pencils, and pamphlets on HBP will be placed. A general waiting area. A table where HBP screeners will be seated with participating church members. An enclosed area where church members who must remove some article of clothing can go to have their blood pressure taken.	Lecture
Use Referral System	Pass out lists of health agencies, private doctors, and referral guidelines. Explain how to use.	

Session 4

Training Methods

Topic	Content	Method
Preparation for Practice Screening Session	Volunteers will choose a date and time, as well as identify the group, for the practice screening session. Volunteers will identify a coordinator. The coordinator will attempt to solve all problems that arise at the practice screening session independent of the health professional. The health professional will be present to assist if this is not possible.	

Session 5

Overview

Goal:

To provide practice in setting up a church HBP control program.

Behavioral Objective:

At the end of this session, volunteers will be able to:

Set up and operate a church HBP control program.

Materials Needed:

1. Posttest.
2. Mercury sphygmomanometers.
3. Stethoscope.
4. Data collection forms.

Session 5

Training Methods

Topic	Content	Method
Practice Session	Review of how to set up and operate a screening session	Demonstration and Discussion
	Practice session involving a small group of church members	Practice

Session 5

Course Evaluation Form

We would be pleased to receive your candid opinions regarding this training program and its effectiveness and value to you. (There is no need to sign your name.)

Directions: Please read each statement, and check the column that most appropriately reflects your opinion.

1 = Poor or not at all
2 = Fair or a little
3 = Average
4 = Good or quite a bit
5 = Excellent or very much

	1	2	3	4	5	Comments
Were program objectives clear?	☐	☐	☐	☐	☐	_____
To what extent do you feel that you are able to:						
a. Measure blood pressure accurately?	☐	☐	☐	☐	☐	_____
b. Complete all data collection forms?	☐	☐	☐	☐	☐	_____
Were handouts adequate?	☐	☐	☐	☐	☐	_____
Rate the quality of instructor's presentations.	☐	☐	☐	☐	☐	_____
Were a variety of teaching/learning methods used?	☐	☐	☐	☐	☐	_____
Was enough time allowed for asking questions?	☐	☐	☐	☐	☐	_____
Do you think the program was well planned?	☐	☐	☐	☐	☐	_____
Was the material new to you?	☐	☐	☐	☐	☐	_____
If the material was not new to you, did you learn anything of value or update your skills?	☐	☐	☐	☐	☐	_____
Was this workshop a good experience for you?	☐	☐	☐	☐	☐	_____

Please list below any content areas that you believe more or less time should be devoted to:

More Time	Less Time
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____

Additional comments or suggestions for improvement.

_____

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